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ERS will discontinue publication of *Rural Conditions and Trends* with this issue; however, much of the information now in *RCaT* will be published through other ERS outlets. These include *Rural America*, which will incorporate some of the information and analyses formerly published in *RCaT*, and the ERS website (<http://www.ers.usda.gov>). Both will provide regular updates of social and economic conditions, timely research, and data on a wide variety of related issues.

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## Rural Conditions and Trends

2000, Volume 11, Number 2

**4 Overview**

*Favorable Rural Socioeconomic Conditions Persist, but Not in All Areas*

**9 Low-Wage, Low-Skill Employment**

*Rural Low-Wage Employment Rises Among Men*

*Low-Wage Counties Face Locational Disadvantages*

**27 Population and Employment**

*Nonmetro Population Growth Rate Recedes in a Time of Unprecedented National Prosperity*

*Nonmetro Migration Drops in the West and Among College Graduates*

*Nonmetro Employment and Unemployment Trends Remain Favorable*

*Almost Half of Hired Farmworkers 25 Years and Older Earn Poverty-Level Wages*

**51 Earnings**

*Rural Nonfarm Earnings Increase in 1997, but Lag Urban Earnings Growth*

*Skills Training and Manufacturing Innovations Are Key to Raising Rural Workers' Wages*

**62 Poverty and Income**

*Rural Poverty Rate Declines, While Family Income Grows*

*Food Stamp and Family Assistance Benefits Sharply Decline in the Post-Welfare-Reform Era*

**75 Rural Well-Being**

*Unique Housing Challenges Face Rural America and Its Low-Income Workers*

*Prevalence of Hunger Declines in Rural Households*

**87 Appendix: Data Sources and Definitions**

**94 Appendix Tables**

## Favorable Rural Socioeconomic Conditions Persist, but Not in All Areas

*The socioeconomic climate of rural areas remained favorable in the late 1990's, according to the most current economic and population indicators. Unemployment rates continued to fall, and population, employment, and income remained on the rise, albeit more slowly than earlier in the decade. At the same time, favorable economic performance did not benefit all rural people and areas equally. About 27 percent of rural workers, mostly women or minorities, held low-wage jobs in 1999. Furthermore, low-wage employment was clustered in counties in the Great Plains and South. These counties tended to have small populations, locations remote from urban centers, and less diversified economies.*

**T**his issue of *Rural Conditions and Trends (RCaT)* provides an assessment of the current conditions and trends in socioeconomic well-being for rural people and places during the late 1990's. The core articles update analyses reported annually by focusing on such topics as population, migration, employment, unemployment, poverty, earnings, and transfer payments. Articles that were new to last year's issue on housing and household food security and hunger are featured again this year. Also returning to the issue is an article based on data from ERS's Rural Manufacturing Survey that compares rural and urban wage differentials and examines how the business practices of manufacturing firms shape wage levels.

This year's socioeconomic issue highlights low-wage workers and geographic patterns of low-wage employment, topics of special concern in rural America. Despite the strength of the current economic expansion, over a quarter of rural wage and salary workers ages 25 and older earned full-time-equivalent wages below the poverty threshold for a family of four in 1999 (\$17,028). Earnings among the lowest paid rural workers have grown more slowly than for the rest of the labor force, often less than the inflation rate, even as their education levels have risen. The changing location of economic activities within the United States and across international borders, technological innovations, and declining unionization and real minimum wage rates all play a part in explaining low-wage trends.

Many rural areas where low-wage workers are clustered have been hard hit by these larger economic forces, and have not shared fully in the benefits of national economic growth. Recent rural development policy initiatives, such as the New Markets program, promise to jumpstart growth in many of these distressed areas. At the same time, rural areas face new challenges as the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) gradually moves a new set of workers into the low-wage labor force. The analyses of conditions and trends reported in this issue help us to understand the economic and social context in which these policy developments take place, to identify the people and places that most need assistance, and to appreciate both the possibilities and limitations of our efforts to improve well-being in all of rural America.

The first of two thematic articles examines the prevalence and characteristics of low-wage workers in rural areas. A second article presents a new classification of rural low-wage counties containing high proportions of jobs in low-wage industries and analyzes the geographic and economic characteristics of these counties. Other articles focus on various aspects of socioeconomic well-being among either low-wage workers or low-wage counties.

*Rural Conditions and Trends* last reported on rural socioeconomic conditions and trends in its February 1999 issue (Vol. 9, No. 2), which looked at the socioeconomic status of rural minorities also. That issue painted a mixed picture for economic performance in rural areas for 1996-97. Like their urban counterparts, rural areas saw unemployment decline, per capita incomes grow, and weekly earnings rise because of strong national economic expansion. At the same time, the rural advantage in economic and population growth observed during the early to mid-1990's eroded. Furthermore, significant rural-urban gaps persisted and even widened. This issue shows a continuation and sharpening of the conditions and trends reported last year. Several main themes emerging from the issue's analyses are highlighted on the following pages.

### **Overall Rural Economic Climate Remains Favorable . . .**

Rural areas, as a whole, enjoyed relatively good economic times in the late 1990's, according to the most recent population and economic indicators available (table 1). The rural unemployment rate, which fell to its lowest levels in over 20 years in 1998, dropped even more to 5.1 percent in 1999. Nonmetro employment expanded further in 1999, and nonmetro employment growth even outpaced metro growth during the last 2 quarters of 1998. The population rebound from declines observed in the 1980's continued (at a diminishing rate). Net immigration from metro to nonmetro areas resulted in an average gain of 281,000 people per year between 1997 and 1999. Rural per capita income rose 2 percent in 1997, while rural real earnings per nonfarm job rose by 1.3 percent. Reflecting the strong national economy, annual growth in nonmetro and metro per capita transfer payments to individuals steadily decreased from over 6 percent per year in the early 1990's to around 2 percent per year between 1994 and 1997.

### **. . . But Pace of Growth Slows**

Current trends, however, also show a marked slowing of economic and population growth, compared with trends earlier in the decade. Despite quickening during late 1998, the pace of employment growth slowed to 1.5 percent during 1999. In addition, the nonmetro rate of population growth has steadily dropped since 1994-95, when it momentarily exceeded the metro rate. By 1997-99, the nonmetro rate of population growth was little more than half of the metro rate. Despite the net inflow of people from metro areas, the rate of net migration, which steadily increased during the early and mid-1990's, dropped to about one-half of 1 percent during 1997-99. Reversing earlier trends of record growth, the West was the center of the 1997-99 slowdown in rural migration. Furthermore, much of the recent decrease in rural net migration occurred among college graduates, although the tightened linkages between rural and urban economies make a return to the severe rural "brain drain" of earlier decades seem unlikely.

In response to the policy and program changes brought about by the enactment of PRWORA, as well as to the strong national economy, per capita transfers for the major public assistance programs—Temporary Assistance for Needy Families (TANF), food stamps, and Supplemental Security Income (SSI)—continued to decline sharply. During 1996-97, per capita benefits for TANF declined more rapidly in rural than in urban areas, while per capita benefits for food stamps declined more rapidly in urban than in rural areas.

### **Rural Areas Lag Urban Areas on Many Indicators**

Even in the face of favorable economic conditions, rural areas lagged urban areas on many indicators. Following a longstanding trend, poverty rates were 2 percentage points higher in rural than in urban areas. In 1997, rural areas lagged urban areas by at least \$9,000 in real per capita income and by well over \$7,000 in real earnings per job. These gaps have widened since the late 1980's. Compared with urban economies, rural economies rely more heavily on transfer payments as a source of income. In 1997, per capita transfer payments made up 21 percent of rural personal income, compared with approximately 15 percent of urban personal income.

Furthermore, metro population and employment growth exceeds nonmetro growth. The pattern was reversed in the mid-1990's when rural rates of population and employment growth were higher than urban rates.

### **Benefits of Favorable Economic Conditions Are Spread Unevenly Across Rural Areas**

The current conditions and patterns of growth just reported did not necessarily affect all rural areas equally. For example, not all rural areas in the country have benefited from increased population growth; populations of many nonmetro counties once again declined in the late 1990's. Despite the overall decline in rural unemployment, it increased in large

## Overview

Table 1

### Indicators of nonmetro economic performance

*Socioeconomic conditions in the mid-1990's show signs of continued improvement, although rural-urban gaps persist*

Indicator	Performance	Indicator	Performance
	Percent		Percent
Annual population change:		Annual employment change:	
1995-99	0.62	1995-99	1.0
1990-95	.96	1990-95	1.6
Annual net migration rate:		Annual unemployment rate:	
1995-99	.35	1999	5.1
1980-90	.72	1995	6.3
		1991	7.7
Poverty rate:		Annual change in real per capita income:	
1998	14.3	1996-97	2.06
1994	16.4	1994-97	2.00
1989	15.7	1991-94	1.57
	1997 dollars		
Per capita income:		Annual change in real transfer payments: <sup>1</sup>	
1997	19,090	1996-97	1.74
1994	17,993	1994-97	2.59
1991	17,170	1991-94	3.45
Per capita transfer payments: <sup>1</sup>		Annual change in earnings per nonfarm job:	
1997	4,055	1996-97	1.3
1994	3,756	1991-97	.4
1991	3,395	1989-91	-1.3
	1997 dollars		1997 dollars
Per capita earnings:		Rural-urban gap in per capita income:	
1997	11,630	1997	7,771
1994	11,139	1991	6,897
1991	10,492	1989	7,134
Earnings per nonfarm job:		Rural-urban gap in earnings per nonfarm job:	
1997	22,985	1997	9,840
1991	22,473	1991	8,482
1989	23,059	1988	8,171
	1999 dollars		1999 dollars
Average weekly wage and salary earnings:		Rural-urban gap in average weekly earnings:	
1999	485	1999	125
1990	438	1990	130

<sup>1</sup>Transfer payments to individuals account for 96 percent of all transfers.

Source: Other articles and appendix tables in this issue of *Rural Conditions and Trends*, Economic Research Service.

clusters of counties in the Great Plains and South Central States. As the next section discusses, rural counties with high rates of low-wage employment are primarily clustered in parts of the Great Plains and South.

### **Low-Wage Employment Higher in Rural Than in Urban Areas**

About 27 percent of the adult rural wage and salary workforce in 1999 earned less than the poverty threshold for a family of four (adjusted for full-time equivalency) and were thus classified as low-wage workers. Low-wage employment rates were higher in rural areas than in urban areas. Rural-urban differences in the kinds of jobs available and in education levels partly explain the employment rate differences. Urban jobs, for instance, are still more likely to require a college degree or highly specialized technical skills than are rural jobs.

In addition, current rural low-wage employment rates remain higher than in the late 1970's, despite a better educated workforce today with very low unemployment rates. Rural low-wage employment has also changed since the late 1970's. Although most low-wage workers are women, men's share of low-wage work has risen over the past two decades. Similarly, Black rural workers comprise a smaller share of the total low-wage workforce today than in the past, with their numbers replaced by the rising share of Hispanic workers.

### **Low-Wage Counties Are Small and Often Far From Metro Areas**

ERS identified a set of rural counties that had high rates of employment in low-wage industries in 1995. (For an explanation of what a low-wage county is, see the box in "Low-Wage Counties Face Locational Disadvantages," p. 18) Although located in all regions of the United States, most low-wage counties were clustered in the Great Plains and the South. A typical low-wage county had a small population, was distant from large urban centers, and lacked economic diversity. The kinds of industries found disproportionately in low-wage counties tended to pay lower wages on average. More importantly, however, nearly all industries in low-wage counties paid lower wages than the same industries in other counties, implicating location as the primary reason for low earnings rather than industry mix.

Low-wage counties made a surprisingly strong showing by some measures, however. Unemployment rates were only slightly higher, and net immigration slightly lower, than in other rural counties. In fact, outside the farm areas of the Great Plains, low-wage counties enjoyed above-average immigration and population growth. The reasons are unclear, but low-wage counties may attract low-wage workers because of lower living costs and the relative ease of finding work that requires low skills or education.

### **Characteristics of Low-Wage Counties Vary by Region**

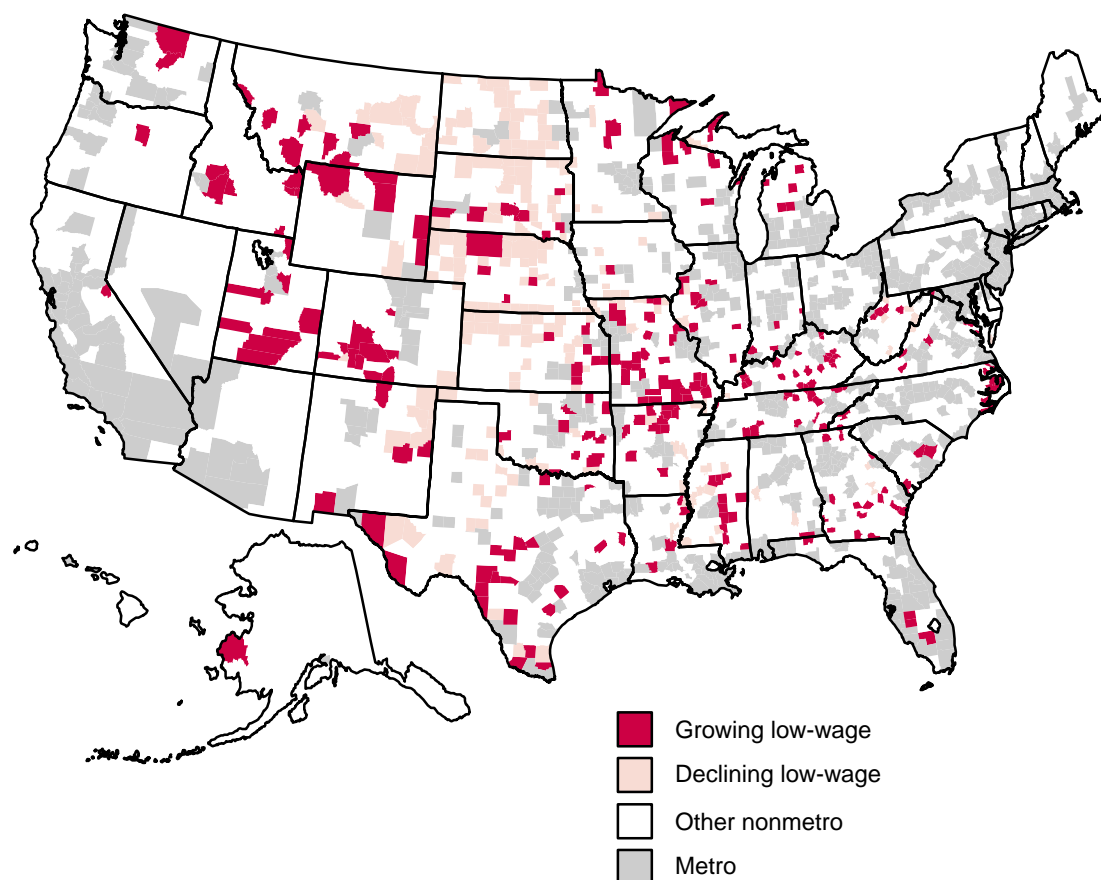
While low-wage counties shared some characteristics, much depended on the region in which they were located (fig. 1). Not surprisingly, low-wage counties in the Great Plains largely depended on farming and had slower population growth than other low-wage areas. As is true for the Plains overall, education levels were fairly high, even higher than non-low-wage counties in the South. But low-wage counties in the Great Plains were also among the smallest, most remote, and least economically diverse in the Nation. In comparison, low-wage counties in the South reflected the region's mix of low education levels and a greater range of economic activity. Despite the large number of persistent-poverty areas in the South, however, poverty rates in most southern low-wage counties were not unusually high. The article on the geography of low-wage employment further explores the relationship between persistent poverty and low earnings (see "Low-Wage Counties Face Locational Disadvantages," p. 18).

The extent to which the conditions and trends of the late 1990's continue in the 21st century depends largely on national macroeconomic and demographic changes. How States

Figure 1

# **Population change in low-wage counties, 1990-99**

*Most low-wage counties in the Great Plains lost population in the 1990's*



Source: Calculated by ERS using data from the Bureau of Labor Statistics.

and local communities deal with the challenges of building and sustaining strong rural economies will affect future trends and conditions.

## **A Special Note About *RCaT***

ERS will discontinue publication of *Rural Conditions and Trends* with this issue. Since 1990, *RCaT* has provided information and understanding about the effects of demographic and economic trends and policies on rural people, economies, and communities. In building a database of reliable indicators for publication in *RCaT*, ERS has relied not only on national data bases from other government agencies, but the agency has also developed its own research tools to communicate with its customers in the policy and research arenas. In its efforts to continue to use the most effective means of information dissemination, ERS will begin in 2001 to incorporate some information and analyses formerly published in *RCaT* in its publication, *Rural America*, combining feature articles with regular updates of social and economic conditions. Readers may also find much of the information now in *RCaT* at the ERS rural development briefing room website: <http://www.ers.usda.gov/rural>. In addition to articles on current socioeconomic conditions, the briefing room will contain timely research articles and data on a wide variety of related issues. [Peggy J. Cook, 202-694-5419, [pcook@ers.usda.gov](mailto:pcook@ers.usda.gov); and Robert M. Gibbs, 202-694-5423, [rgibbs@ers.usda.gov](mailto:rgibbs@ers.usda.gov)]

## Rural Low-Wage Employment Rises Among Men

*In 1999, nearly one-fourth of the rural wage and salary workforce over 25 earned low wages. A large share of these workers are the sole or main wage earner in the household. Rural low-wage workers are more likely to be employed in service and retail trade industries. But within a given industry, low-wage workers tend to be employed in less-skilled occupations requiring less education. Although low-wage rural workers continue to be overwhelmingly women and minorities, the share of White men in low-wage jobs has grown since 1979.*

According to 1999 data from the Current Population Survey, nearly 5 million rural wage and salary workers ages 25 and older (27.2 percent) received wages that, if earned full-time, full-year, would not lift a family of four above the official poverty level. Brisk growth in the U.S. economy since mid-decade has pushed up real wages and improved living standards for most workers. In 1999, average weekly earnings for rural wage and salary workers stood at \$485, a 10.7-percent increase since 1990 after adjusting for inflation. Nonetheless, the share of rural workers receiving low pay at present remained higher than the 24.6 percent rural rate in 1979 or the current urban rate of 19.3 percent. Rural low-wage workers earned a median hourly wage of \$6.50, slightly less than the \$6.65 earned by their urban counterparts and much less than the \$11.25 rate earned by rural wage and salary workers overall. (See box "How Low-Wage Workers Are Defined.")

The pervasiveness of rural low-wage employment in the face of significant technological change and increased policy emphasis on workforce development signals a fundamental challenge to the Nation's ability to improve the well-being of working citizens. Global economic competition and innovation continue to dampen wage pressures at the low-wage end of the rural labor market, even as these forces present new opportunities for many workers. The Personal Responsibility and Work Opportunity Reconciliation Act of 1996, designed to reform the Nation's welfare system, will have its largest wage and employment impact on the low-wage workforce, as recipients and ex-recipients of public assistance join the ranks of low-wage earners. Understanding both the current characteristics and recent trends among low-wage workers helps us to assess the prospects for change and to tailor policies that truly meet the needs of this segment of the rural labor force.

Most rural adult low-wage workers hold jobs that require limited education or training and that offer limited paths for advancement. In places where low-wage employment is concentrated, workers' prospects are constrained even more by low wage scales and by long distances to good jobs in larger labor markets (see "Low Wage Counties Face Locational Disadvantages," p. 18). In addition to schooling and geography, stagnant or declining wages in rural labor markets since the 1970's has spread low-wage work to jobs other than the low-skilled. Today, the likelihood of holding a low-wage job varies widely by the kind of job held and by the personal characteristics of workers. Even so, low-wage employment can be found among all demographic groups, and in all major industry and occupation groups. Men were historically less likely to work in low-wage jobs than women, but are becoming a larger share of the low-wage labor force.

### How Low-Wage Workers Are Defined

In this analysis, low-wage workers are defined as persons ages 25 and older employed in the wage and salary workforce whose earnings, adjusted to a full-time, full-year equivalent, would fall below the weighted poverty threshold for a family of four (\$17,028 in 1999). Workers younger than 25 are excluded to omit recent labor force entrants who are more likely to have unstable work histories or weak labor force attachment.

Social scientists have used numerous definitions of low-wage work. A common alternative to the one provided here is to compare full-time full-year equivalent earnings with a three-person family poverty threshold, in keeping with actual average family size in the United States. Others argue that the official poverty standards are inappropriately low for families with working adults, and, thus, that the low-wage threshold should be significantly higher than the four-person family threshold. We use the four-person measure both because it has substantial precedence in the labor literature and because it appears to represent a middle ground between more and less restrictive definitions.



### Low-Wage Workers Are Not Necessarily Poor

We base the measure of low wages in this article on the weighted average poverty threshold for a family of four (\$17,028). Most rural low-wage workers, however, do not live in poor families, often because the family has other wage earners or because these families receive cash income from other sources. In addition, family size or composition may indicate a poverty threshold different from the adjusted family-of-four threshold used here.

Similarly, not all adult low-wage workers experience severe economic hardship. In particular, the presence of other, often well-paid workers in the household mitigates the impact of a worker's low pay on his or her well-being. In 1999, a significant share of rural low-wage workers, 43 percent, were either the sole wage earner in their households, or the household member with the highest weekly earnings, the *primary* earner (table 1). Rural low-wage men were more likely to be sole or primary earners in a household than were women, while rural workers with a high school education or less were more likely to be sole or primary earners than were workers with at least some college.

Other low-wage workers are *secondary* earners in the sense that they bring home less pay than the primary earner. Secondary low-wage workers are the least likely to experience severe hardship because by definition they live in two-or-more-earner households. Some of these workers may supplement comfortable household incomes with low-paying jobs that have other desirable attributes, such as flexible work hours.

In many households with secondary low-wage workers, however, both primary and secondary workers hold low-wage jobs. For these households, the lack of nonwage benefits and greater instability that are commonly associated with low-wage employment may affect their long-term financial security in a way not fully captured by total income.

In addition to the worker's earnings role within a household, the Current Population Survey allows us to identify the relationship of each adult member to the "respondent" who answered the survey. Most rural low-wage workers—over 80 percent—were either the respondent or the spouse. The definition of low-wage worker used in this article excludes young adults under 25, so that few workers in this analysis could be classified as "children" within the household. This distinction is important because children are typically secondary wage earners, and are not a mainstay of a household's financial support.

Table 1

#### Rural low-wage workers by earnings role in the household, 1999

*Slightly less than half of all rural adult low-wage workers are the sole or primary wage earner in the household*

Item	Sole earner	Primary earner	Secondary earner		Total
			Low-wage household	Other household	
Percent					
All	32	11	7	50	100
Men	33	19	8	40	100
Women	31	7	7	55	100
Black	39	13	10	38	100
Hispanic <sup>1</sup>	29	14	11	46	100
White	30	11	6	53	100

<sup>1</sup>Hispanics may be of any race. All other categories exclude Hispanics.

Source: Calculated by ERS from the 1999 Current Population Survey microdata earnings file.

### Rural Low-Wage Shares Remain Above 1979 Rate

The rural low-wage rate of 27.2 percent in 1999 far exceeded the urban rate of 19.3 percent. The rural-urban gap in low-wage employment has remained remarkably stable, with rural and urban changes in the share of low pay tracking each other closely in most years. The higher rural rate may be due in part to cost-of-living differences that are reflected in lower rural take-home pay, although no definitive studies document lower rural living costs. Basic differences in the industrial and occupational structure of the rural and urban economies likely play a more decisive role.

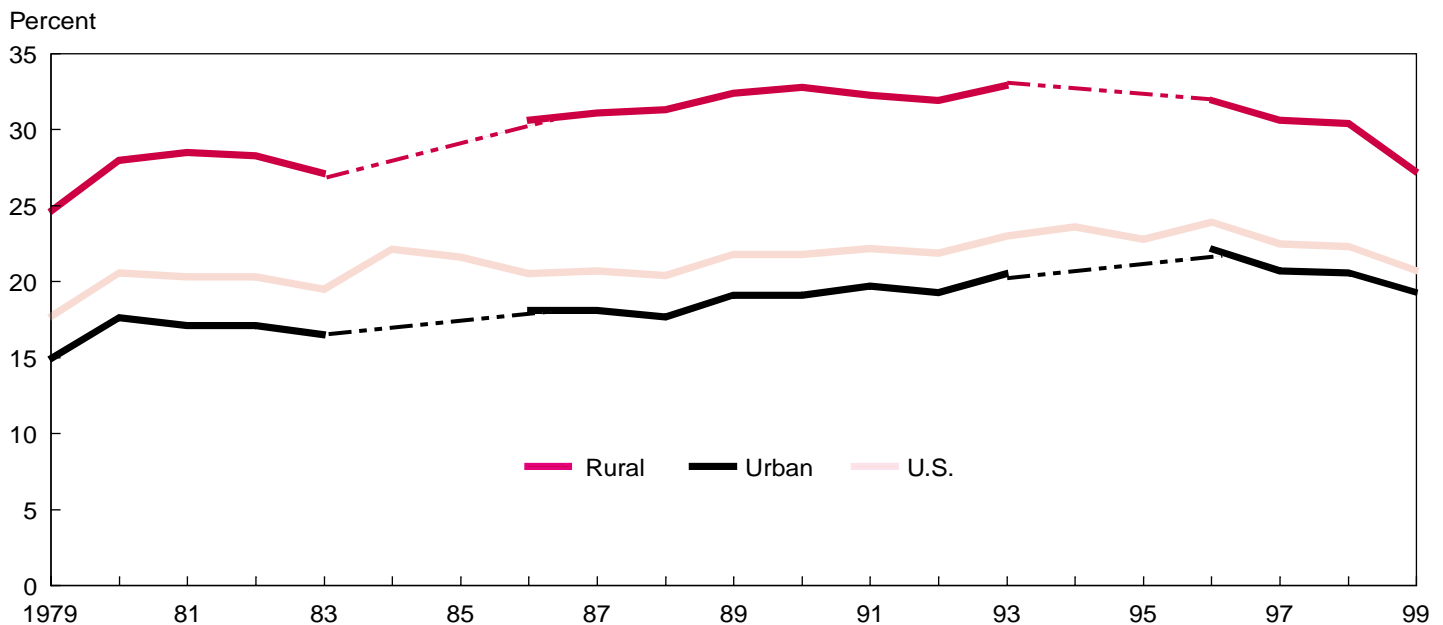
In rural and urban labor markets, changes in the share of workers earning low wages have been significant. Since the 1970's, the share of rural workers 25 and older earning low wages rose substantially, up from 24.6 percent in 1979 (fig. 1). The rise reflects national economic trends, especially the relatively slow productivity gains over much of the period, shifts in labor demand toward more highly skilled and educated workers, and the declining influence of labor unions. The urban low-wage share, meanwhile, rose from a 1979 low of 14.9 percent.

Despite the difficulty of measuring rural wage trends due to periodic changes in the official definition of metro since 1979, it is evident that the rise in low-wage employment has not been constant. In many ways, the 1980's and 1990's trends are mirror images. Average earnings rose only slightly in the 1980's, while the income distribution widened. As the demand for workers with few skills or limited education fell, their wages dropped,

Figure 1

### Share of experienced wage and salary workers earning low wages, 1979-99

*The percentage of rural wage and salary low-wage workers has fallen since 1996*



Note: The dotted lines indicate data are not available.

Source: Calculated by ERS using data from the Current Population Survey earnings files, 1979-99.

while those with college degrees rose. Rural areas were hit harder than urban areas, because the rural industry and occupational mix required a lower share of highly educated and highly skilled workers.

In the 1990's, the share of rural workers earning low wages fell as real wages began to increase once more. The size of the urban low-wage workforce declined at the same time, at a slightly smaller rate. Changes in both workers' skills and job quality were partly responsible for the recent rural low-wage trends, as workers became better educated and as high-tech jobs requiring a more skilled workforce filtered into rural areas. The decline in the low-wage share of workers between 1989 and 1999 was shared by all demographic groups.

### Most Low-Wage Workers Are Women and Minorities

Perhaps the most salient feature of the rural low-wage workforce is the preponderance of women and racial and ethnic minorities, despite the slow decline of long standing discrimination in education and labor markets. Women made up 67.3 percent of rural low-wage employment in 1999, although their overall employment share was just 48.7 percent. Relative to men, rural women are more likely to engage in part-time work, more likely to transition in and out of the labor force to meet household obligations, and more likely to work in jobs with limited bargaining power with employers.

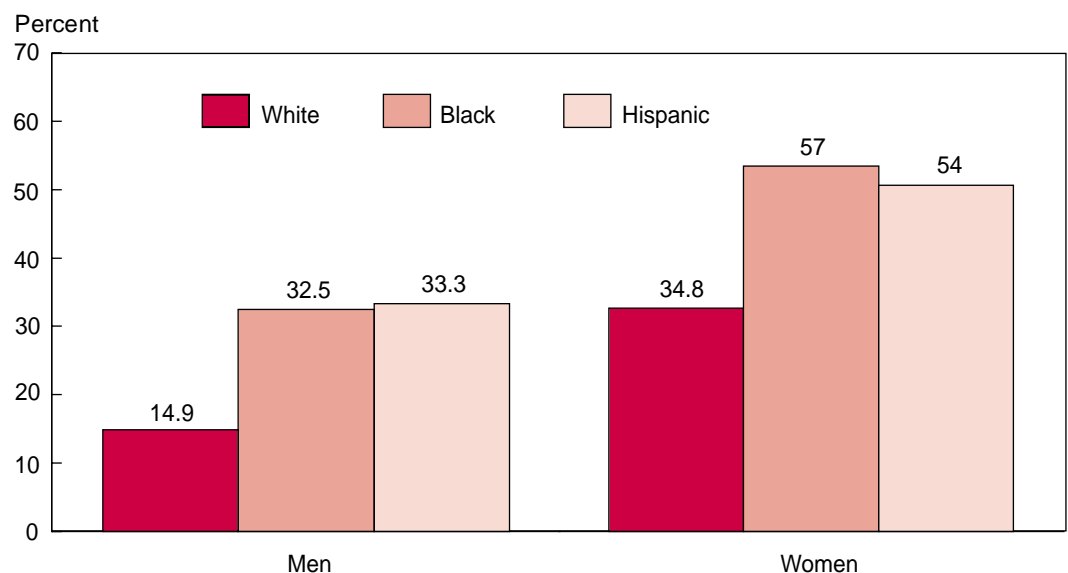
Women's participation in low-wage work, however, depends critically on race and ethnicity. Black women were the most likely group to be employed in low-wage work (57 percent), followed by Hispanic and white women, Hispanic and black men, and finally white men, just 14.9 percent of whom receive low wages (fig. 2). White men made up 44 percent of the overall rural workforce, but only 24 percent of the low-wage workforce in rural areas.

The large low-wage share among rural blacks in general (46 percent), and black women in particular, reflects the historical role of the South as a predominantly low-wage region

Figure 2

### Share of rural wage and salary workers in low-wage employment by gender and race/ethnicity, 1999

*Woman and minorities are much more likely to be engaged in low-wage employment*



Source: Calculated by ERS using data from the 1999 Current Population Survey earnings files.

and as the home of a majority of rural black workers. In effect, they have long faced a low-wage “double jeopardy,” both through the effects of discrimination and by participation in a labor market characterized by relatively strong demand for workers with limited skills.

A similar phenomenon may be observed in the West, where the fast-growing rural Hispanic population is changing the face of low-wage work in that region. Due to a combination of their increased numbers in the labor force and an upward trend in low-wage employment rates, Hispanics now comprise a majority of the low-wage workforce in the rural West, just as blacks once did in the South.

Racial and regional profiles are often intertwined. The South maintained its lead as the region with the highest share of rural low-wage employment (fig. 3). Yet regional differences have narrowed dramatically since 1979. Low-wage employment has grown more slowly in the rural South than elsewhere. Meanwhile the rural West, where low-wage employment was once relatively uncommon, now has a more prominent low-wage workforce (25.1 percent) than either the Northeast or the Midwest.

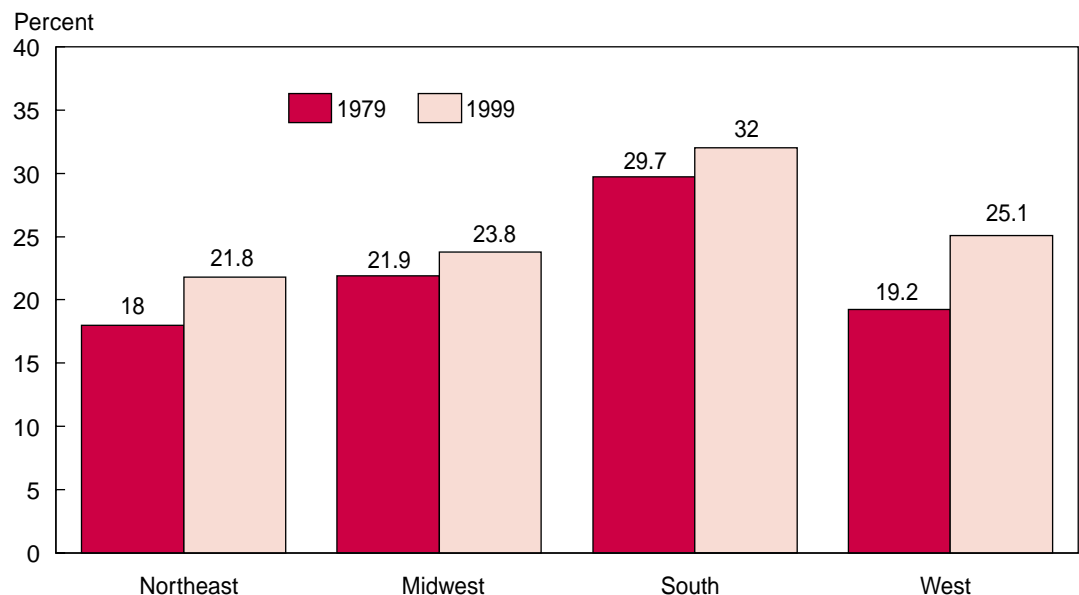
### Service Sector, Blue-Collar Occupations Dominate Rural Low-Wage Employment

The kinds of services performed or goods produced are key determinants of workers' earnings. Industry is the best measure of this dimension of a worker's employment. Low-wage workers are present in every major industry group, but tend to be concentrated in a few major groups (table 2). More than half of all low-wage workers were employed in the retail trade (25 percent) and service industries (37 percent) in 1999, which comprised well under half the total employment for other rural workers. Many jobs in these industries involve entry-level work requiring few pre-existing skills, thereby offering valuable experience even for older labor force entrants. But these jobs often provide limited opportunities for career advancement and long-term wage increases.

Figure 3

### Share of rural wage and salary workers in low-wage employment by region, 1979 and 1999

*Although rural Southerners are the most likely to work in low-wage jobs, low-wage employment grew fastest in the rural West*



Source: Calculated by ERS using data from the 1979 and 1999 Current Population Survey earnings files.

Table 2

### Low-wage employment by major industry, 1999

*Low-wage workers are concentrated in the agriculture, retail trade, and service industries*

Industry	Rural		Urban	
	All	Low-wage	All	Low-wage
Percent				
Agriculture	2.5	4.4	1.1	2.8
Construction	6.3	3.8	5.6	4.0
Mining	1.4	.5	.3	.1
Manufacturing	23.2	16.6	16.4	12.1
Transportation	7.1	3.4	8.4	4.8
Wholesale trade	3.2	2.8	4.2	3.5
Retail trade	13.7	24.9	13.1	25.8
Finance, real estate, insurance	4.1	3.9	7.5	4.2
Services	32.7	36.8	37.8	40.6
Government	5.8	3.0	5.7	2.1
Total	100.0	100.0	100.0	100.0

Source: Calculated by ERS from the 1999 Current Population Survey earnings file.

The industry mix of low-wage employment in rural and urban areas shows a striking resemblance. About 66 percent of urban low-wage workers were engaged in retail trade or service industry employment, only slightly more than for their rural counterparts (62 percent). Low-wage work in both urban and rural areas was relatively infrequent in industries that tend to provide more skills training or job security, including the government and manufacturing industries. The long, steady decline in manufacturing employment, coupled with a growing service sector, has contributed significantly to the rise in low-wage work nationwide.

But while pay levels appear to be rooted largely in the similarity or divergence of their industry employment patterns, rural low-wage workers also perform very different kinds of jobs in industries, compared with other rural workers and with urban low-wage workers. Overall, rural low-wage employment is concentrated in a few major occupational groups, much as with key industries (table 3). Most low-wage workers are employed in less skilled white- and blue-collar occupations, especially service occupations. A much lower percentage are managers or professionals, holding jobs that often require moderate to high levels of education. Workers in these "atypical" low-paying jobs, usually women, are more likely to be employed part-time.

Within industries, occupational divisions sharply demarcate low-wage work from other employment. In manufacturing, an industry employing relatively few low-wage workers, two-thirds of these workers were engaged in blue-collar occupations, versus half of all rural manufacturing workers (table 3). The contrast in services was even starker, with nearly 60 percent of low-wage workers in blue-collar and service occupations, twice the overall rate. Occupational concentration, therefore, seems to be key in understanding the industrial make up of low-wage work. In turn, occupational employment is, to a large degree, a product of a worker's level of education and training.

### Low-Wage Work Tied to Education

Because the likelihood of entering particular occupations and industries strongly depends on a worker's skills and knowledge, social scientists usually point to low levels of these attributes as a reason for low pay. The amount of schooling a worker has completed, for example, typically indicates potential productivity, and therefore, the amount an employer will pay to hire and retain a worker.

Not surprisingly, rural low-wage workers average fewer years of schooling than do other workers, and the likelihood of earning low wages falls sharply as educational attainment increases (fig. 4). In 1999, about half of rural workers without a high school degree earned low wages, compared with only 10 percent of college graduates, and 23 percent of those with at least 1 year of college. In most cases, urban workers were less likely to hold low-wage jobs than were rural workers at each level of educational attainment. Urban high school dropouts were an exception, however, and were about equally likely to

Table 3

**Rural low-wage employment by major occupation, 1999**

*A majority of low-wage workers are employed in service and less skilled white collar occupations*

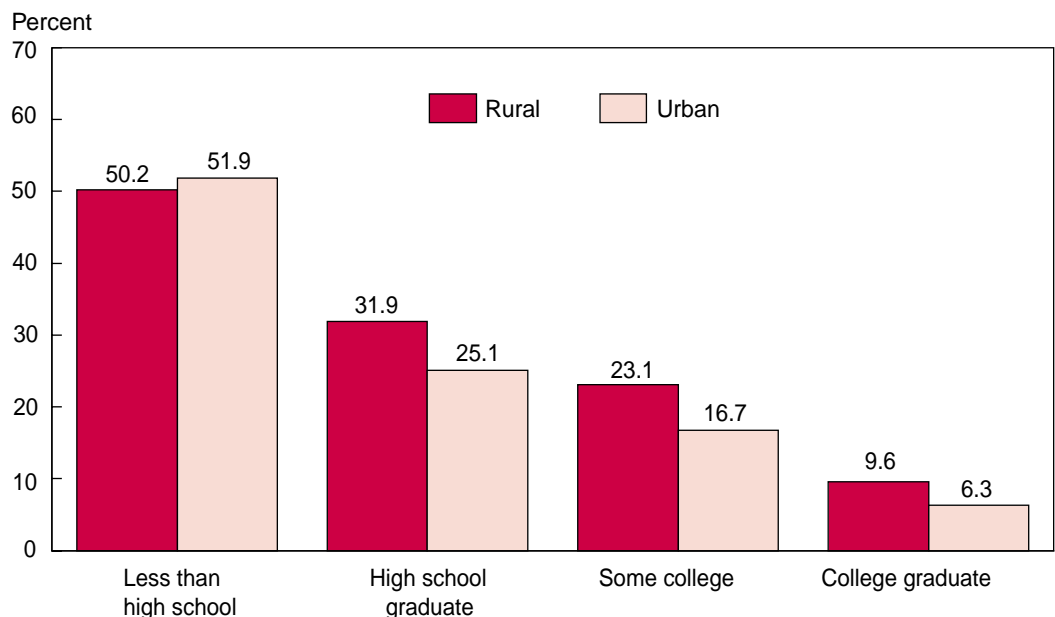
Occupation	All		Manufacturing		Service industry	
	Low-wage	Other	Low-wage	Other	Low-wage	Other
Percent						
Managers, professionals, technical	11.3	28.8	3.5	15.3	19.4	56.7
Sales, clerical, administrative	28.7	21.5	10.9	9.2	21.9	16.8
Service	27.6	11.6	3.5	1.3	49.2	17.4
Farm	4.6	2.2	.9	.8	1.1	.9
Craft and repair	6.0	14.9	13.1	23.9	2.1	4.7
Other blue-collar	21.8	21.1	68.1	49.5	6.3	3.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Calculated by ERS from the 1999 Current Population Survey earnings file.

Figure 4

**Share of rural and urban wage and salary workers in low-wage jobs by education, 1999**

*Urban workers at most education levels are less likely to hold a low-wage job than are rural workers*



Source: Calculated by ERS using data from the 1979 and 1999 Current Population Survey earnings files.

be low-wage employees. Previous issues of *Rural Conditions and Trends* have reported near-convergence in the wages of rural and urban workers without a high school diploma, a finding consistent with similar rates of low-wage employment.

### Men's Share of Low-Wage Work Has Risen

Although the 20-year rise in low-wage employment affected workers in all demographic categories, the face of the low-wage workforce has changed significantly since the late 1970's. Despite the influx of women into the labor force, men made up a larger proportion of the low-wage rural workforce in 1999 than in 1979, increasing their share from 29 percent to 33 percent, while their share of the total labor force slipped from 58 percent to 51 percent (table 4). Through an increase in educational attainment and occupational mobility, women were able to stay ahead of wage stagnation, and the share of women workers earning low wages remained constant. In fact, the rise in low-wage employment in both rural and urban areas since the late 1970's is entirely attributable to stagnant or falling wages among men.

A similar shift has occurred in the minority composition of rural low-wage employment. Since 1979, Black workers have held a constant share of the low-wage workforce, while the share of Hispanics has risen. The increase in Hispanic representation among rural low-wage workers is not surprising, given the large increase in the rural Hispanic population during the period. The shift from Blacks to other workers, however, runs contrary to the generally increasing proportion of Blacks in the rural workforce. As is true for women, the share of Blacks engaged in low-wage work has remained fairly stable (47 percent in 1979 to 46 percent in 1999). Meanwhile, White men and Hispanics overall were more likely to work for low pay in 1999 than was true in 1979. The increase in the Hispanic low-wage rate, coupled with population growth, largely explains the rise of the West as a new center of low-wage employment.

For both women and Blacks, the stability in low-wage employment trends is welcome news, representing gains in education and skills, in labor force attachment, and in career mobility. Yet, it is also a manifestation of the spread of low-wage work beyond its traditional bounds to affect jobs historically held largely by Whites and men. In spite of the contin-

Table 4

### Distribution of rural low-wage workers by gender and race/ethnicity

*The rural low-wage workforce had a greater proportion of Hispanics and men in 1999 than in 1979*

Item	Low-wage		All workers	
	1979	1999	1979	1999
Percent				
Men:				
Black	5.4	4.5	4.2	3.7
Hispanic <sup>1</sup>	1.8	3.4	2.4	2.8
White	21.0	23.9	50.9	43.8
Other	.8	.9	1.0	1.1
Total	29.0	32.7	58.5	51.4
Women:				
Black	8.4	9.4	4.2	4.5
Hispanic	1.9	3.7	1.5	1.9
White	59.6	52.6	34.8	41.2
Other	1.1	1.6	1.0	1.1
Total	71.0	67.3	41.5	48.7

<sup>1</sup>Hispanics may be of any race. All other categories exclude Hispanics.

Source: Calculated by ERS from the 1979 and 1999 Current Population Survey microdata earnings files.

ued predominance of less educated workers among the low-wage workforce, the share of workers with at least some college who hold low-wage jobs has increased significantly between 1979 and 1998, especially for college graduates. The increases in low-wage work are also apparent in higher skilled occupations, especially administrative, managerial, professional, and skilled craft occupations. It remains to be seen whether recent declines in rural low-wage employment will continue, or whether longer term trends will re-establish themselves in the wake of inevitable economic downturns.

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## Low-Wage Counties Face Locational Disadvantages

*Rural counties with the largest share of jobs in low-wage industries are typically less populated and more remote from urban centers. These locational attributes coincide with fewer job opportunities in industries, such as manufacturing, that typically pay high wages. Yet most of the difference between low-wage and other rural counties is rooted in lower wage scales across all industries. Although adults in low-wage counties have less education and labor force participation overall, the role played by these forces varies by region.*

**L**ow-wage employment exists in every corner of rural America and is a significant share of all rural jobs. Yet, the distribution of low-wage employment reflects strong geographic patterns. In some rural counties, low-wage work accounts for half or more of the available jobs, essentially creating a low-wage local economy. This article describes the demographic and economic attributes of 465 rural counties with the highest proportion of workers employed in low-paying industries (see box, “What Is a Low-Wage County?”).

The low-wage counties identified here do not follow the more familiar geographic patterns of local economic distress, such as persistent poverty. Although earnings in low-wage counties were 8 percent lower than in other rural counties in 1997 (the most recent year for which data are available), poverty, unemployment, and population growth rates were not substantially different from those of other rural counties. However, low-wage counties offer a different mix of jobs. Industries that pay well as a rule are less common in these counties. In addition, jobs pay less, on average, than similar jobs elsewhere, reflecting both lower productivity and a relative lack of competition among employers.

Low-wage counties typically have a small number of workers and are located outside the commuting range of metro labor markets. Young, educated workers in these areas, facing a set of local jobs that offer limited room for advancement, often choose to move to larger, more diverse, and more lucrative job markets. With a long history of outmigration and, consequently, a larger share of older workers with limited formal education, low-wage counties find it difficult to attract more technology-dependent, “new economy” industries that offer skills development and wage progression.

### Low-Wage Counties Tend To Be Small, Less Urban, Remote

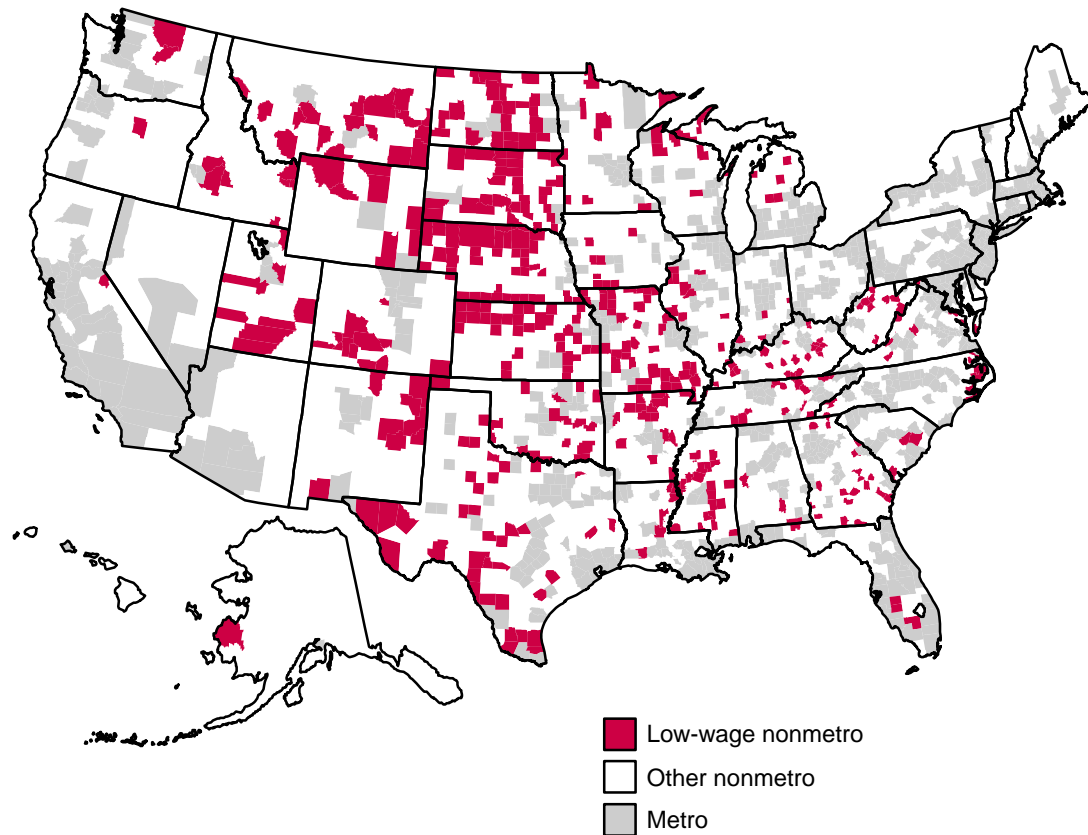
Low-wage counties are present in three of the four Census regions (the Northeast has no low-wage counties), primarily in a few clusters (fig. 1). The northern Great Plains, a region of low population density and few cities, has the largest cluster of low-wage counties. Nearly half are located in just three States: North and South Dakota and Nebraska. Smaller concentrations are evident in the Ozarks of southern Missouri and northern Arkansas; along the Rio Grande River in southern Texas; in parts of Appalachia and the coastal plains of the Southeast (including the southernmost portion of the Mississippi Delta); near the northern Great Lakes; and in scattered areas across the intermountain

### What Is a Low-Wage County?

A county is identified as low-wage if it falls into the top 20 percent (quintile) of rural counties ranked by the share of wage and salary workers in low-wage industries. At least 41 percent of all workers in these 465 counties are employed in industries paying average wages that would not lift a full-time, full-year worker above the weighted-average poverty threshold for a family of four (\$15,569 in 1995). This study is unique in that average wages are calculated for each three-digit SIC industry in each county, rather than assuming a single average for each industry.

The data source for this analysis is the 1995 Covered Wages and Employment Data collected by the Bureau of Labor Statistics of the U.S. Department of Labor. Because only total payroll and total employment by industry are available, a simple measure of earnings-per-worker would understate the actual wage rate for part-time workers. We used industry-specific shares of part-time workers from the Current Population Survey to adjust average wages. The exact composition of the top quintile would change slightly if we used a different year or a different poverty threshold. However, most of the identified counties would be categorized as “low-wage” and the geographic distribution of low-wage counties would remain stable under a fairly wide range of alternative assumptions.

Figure 1

**Nonmetro low-wage counties, 1995***Most nonmetro low-wage counties are located in the Great Plains and the South*

Source: Calculated by ERS using data from the Bureau of Labor Statistics.

West. Low-wage counties are absent altogether in rural New England and through the northern manufacturing belt from New York through Ohio. In the Piedmont South, also a manufacturing region, no rural counties that surround the wide band of metro areas stretching from eastern North Carolina to northern Alabama were typed as low-wage. Only three low-wage counties are found in the States along the Pacific Coast, where most rural economies have been growing and diversifying in recent years. Hawaii and rapidly growing Arizona and Nevada have no low-wage counties.

The areas in which rural low-wage counties are clustered tend to have smaller than average populations, are less urban, and are remote from metro areas. Over 90 percent of low-wage counties have fewer than 20,000 people, compared with fewer than half of other counties (fig. 2). Only six low-wage counties out of 465 have more than 40,000 people. Their smaller populations also tend to be more dispersed, with fewer large-town dwellers and more people living in villages or open countryside. Two-thirds have no urban population, meaning no towns with at least 2,500 people, compared with one-quarter of non-low-wage counties. Low-wage counties are likely to be some distance away from metro areas as well—over 70 percent are not adjacent to a metro area, compared with 53 percent of other rural counties (table 1).

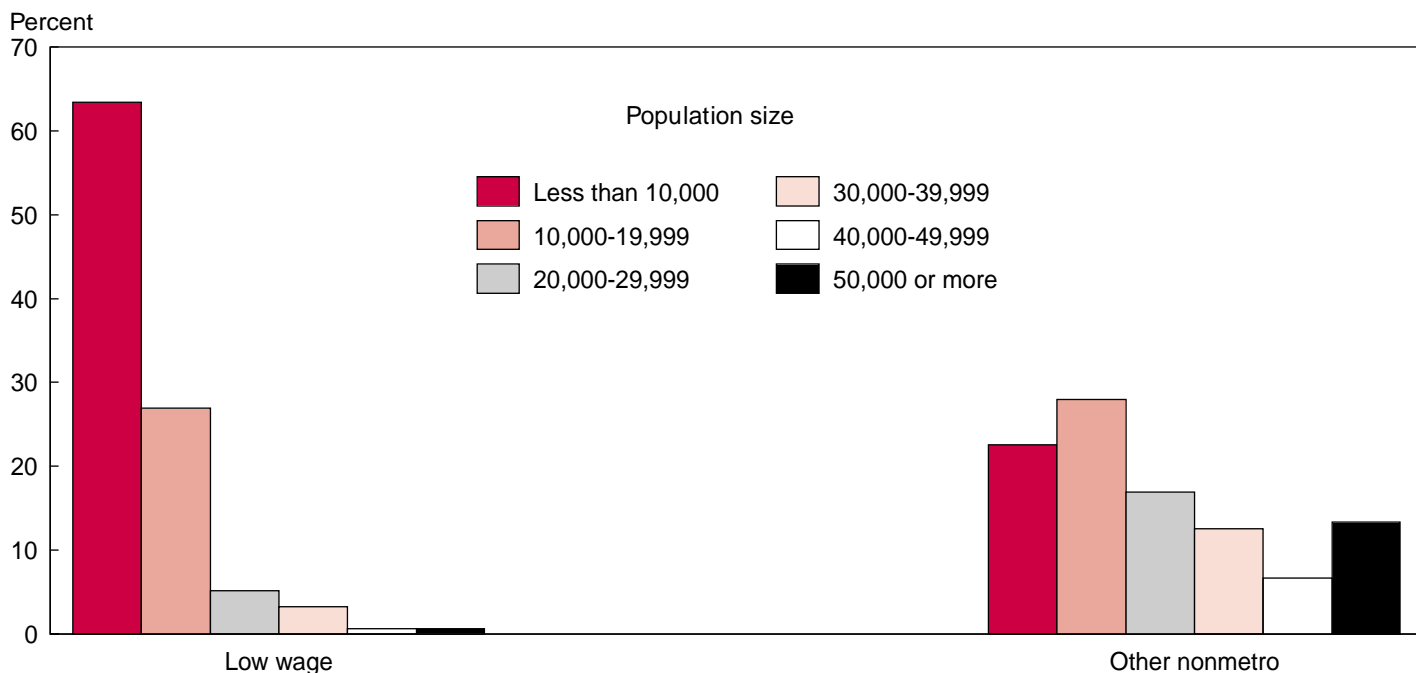
Smaller populations that are remote from urban areas have both advantages and disadvantages for low-wage counties. During the early 1990's, these attributes often attracted new residents looking for an alternative to troubled, congested urban areas. A substantial number of small, remote counties enjoyed renewed employment and population growth,

## Low-Wage, Low-Skill Employment

Figure 2

### Share of low-wage and other nonmetro counties by population size, 1999

Over 90 percent of low-wage counties have fewer than 20,000 people, compared with 50 percent of other counties



Source: Calculated by ERS using data from the U.S. Census Bureau.

Table 1

### Distribution of rural low-wage counties by rurality

Most low-wage counties are remote from cities and have no urban population

Rural-urban continuum	Low-wage counties		Other rural counties	
	Number	Percent	Number	Percent
Adjacent, highly urban	1	0.2	137	7.4
Nonadjacent, highly urban	3	.7	111	6.0
Adjacent, less urban	63	13.6	551	29.9
Nonadjacent, less urban	87	18.7	570	31.0
Adjacent, nonurban	64	13.8	184	10.0
Nonadjacent, nonurban	247	53.1	288	15.6
Total rural	465	100	1,841	100
Total nonadjacent	337	72.4	969	52.7
Total nonurban	311	66.9	472	25.6

Source: Calculated by ERS using 1995 Bureau of Labor Statistics Covered Wage and Employment Data.

or had smaller declines, a welcome change to the economic and demographic declines of the preceding decade. Yet in the long run, the same qualities that appeal to many migrants also deter employers who need ready access to suppliers and customers and larger pools of workers with more diverse skills than small, remote low-wage counties can usually provide. More recent data show that the population resurgence of the early 1990's

has subsided (see box, “The Nonmetro Population Growth Rate Recedes in a Time of Unprecedented National Prosperity,” p. 27).

### Low-Wage Counties Often Depend on Farm Income

Nearly half of all low-wage counties are also classified as farming-dependent in the Economic Research Service’s county typology, which means that a relatively large share of county income derives from farm operations (fig. 3). Most of these counties are located in the northern Great Plains, a region largely bypassed by the economic growth occurring in the rest of rural America.

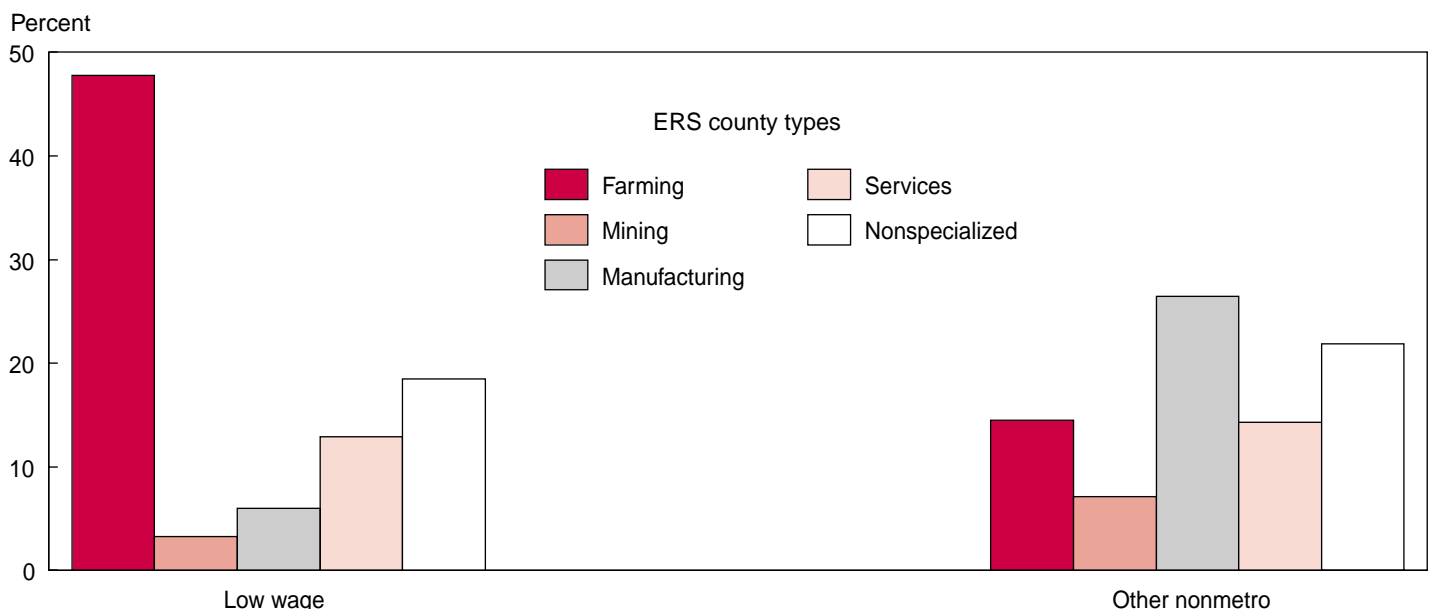
Farm employment, however, is unlikely to be the key source of low wages in many of these counties. The large number of self-employed farm jobs in Midwestern low-wage counties was not counted in the data used to identify low-wage employment. The remaining farm jobs, held mostly by hired farmworkers, typically made up less than 10 percent of all jobs in the county. Rather, farming-dependent counties are often low-wage because they are small and remote—attributes that have discouraged the location and expansion of high-wage industries. Slow-growing or declining employment, coupled with a lack of industrial diversity, left wage and salary workers in these counties with limited opportunities to move out of entry-level jobs requiring relatively little education or training.

Conversely, few low-wage counties depend on mining or manufacturing, which usually pay above-average wages in rural counties. Rural manufacturing has historically relied on a low-cost labor force, and its advantages to employers have been strengthened by improved national transportation and communication networks over the past half century. For the average rural worker, manufacturing offers better paying, steadier employment with fringe benefits such as health insurance and paid leave, compared with many service and trade jobs. Like farming-dependent low-wage counties, those reliant on manufacturing and mining exhibit strong regional concentration. Nearly all manufacturing-dependent low-wage counties are located in the rural South, where manufacturing continues to employ a

Figure 3

### Share of low-wage and other nonmetro counties in ERS county typologies

*Low-wage counties are more likely to be farming-dependent, less likely to be manufacturing-dependent than other nonmetro counties*



Source: Calculated by ERS using data from the Bureau of Economic Analysis.

significant share of the workforce. Similarly, all mining-dependent low-wage counties are in the West.

### **Low Wages Within Industries Define Low-Wage Counties More Than Industry Composition**

Broad differences by economic type suggest that low-wage counties have relatively fewer jobs in industries that typically pay good wages, such as higher education or motor vehicle manufacturing, and more jobs in industries that have mostly low-wage work. Employment shares within detailed industry classifications differ between low-wage and other rural counties (table 2). Six of the 10 industries with the largest employment in low-wage counties qualify as low-wage industries because the average wage was below the poverty threshold for a family of four (\$15,569 in 1995, the year for which low-wage counties are identified). In other rural counties, 2 of these 6 were not in the top 10 industries. Similarly, the 10 largest low-wage industries all exhibit greater employment shares in low-wage counties than in other rural counties. Thus, broad differences in economic type noted above accrue from smaller, cumulative differences within detailed industries.

A county also may have lower wages within each industry, so that even with the same jobs, wages would be lower. Without exception among the top 25 industries, average wages are lower in low-wage counties. Medical doctors and other health care workers in clinics in low-wage counties earn 28 percent less than rural workers in medical clinics elsewhere (\$30,364 and \$42,290). The pay gap is similar for public safety employees and government workers. The gap is smaller for other key industries, with a gap of only 3 percent for banking and 1 percent for home health care.

The industry mix and wage results combined suggest that low-wage counties are unique both because the jobs available are somewhat different and because general wage scales are lower. The larger effect comes from lower wages. A rough measure of the relative contributions of each to the overall low-wage condition can be calculated using different scenarios. If the industry mix remained the same but low-wage counties had the same industry-specific wages as other rural counties, then overall earnings per job would increase 18 percent, from \$16,538 to \$19,575, which explains most of the gap between low-wage and other rural counties, where overall earnings per job is \$20,691. If wages remained constant and industry mix shifted to that of other rural counties, the overall earnings per job in low-wage counties would rise by 4.9 percent, to \$17,189. Thus, industry mix is less a problem for these counties than the lower wages paid by any given industry. Lack of competition in smaller, more isolated labor markets may serve to drive down wages across the board.

### **Education Levels in Low-Wage Counties Are Lower in South, Not in West**

Industry differences are reflected in the labor force characteristics of low-wage counties. Labor force participation rates are lower than average, partly a result of lower wage incentives to employment, but probably also due to slightly older populations and fewer job opportunities for dual-earner households. Similarly, unemployment rates in these counties are slightly above average, although regional differences play an important role here, with rates much lower in the agricultural Great Plains counties than in the South (see "Nonmetro Employment and Unemployment Trends Remain Favorable," p. 39).

Rural areas overall have a larger share of jobs requiring low or medium levels of education and training, compared with urban areas. Corporate headquarters and research and development facilities are less likely to locate in rural areas, and thus skill requirements differ. Lower wage scales and dependence on agriculture in many low-wage counties reinforce the rural-urban education gap. Low-wage counties overall have only slightly lower education levels than other rural counties, with a higher proportion of adults without a high school diploma (30.7 versus 35.4 percent) and a lower proportion of college graduates (10.8 versus 12.9 percent) (table 3).

Table 2

**Top 25 industries in rural counties, 1995**

*Rural low-wage counties have lower wages across all industries compared with other rural counties; they also have a higher share of workers in the top low-wage industries, such as eating and drinking establishments, grocery stores, hotels and motels, and gas stations*

Rank	Standard Industrial Classification	Low wage-counties			Other rural counties		
		Jobs	Share of jobs	Annual earnings per job	Rank	Share of jobs	Annual earnings per job
			Percent	Dollars		Percent	Dollars
1	Elementary and secondary schools (821)	128,976	10.6	20,230	1	7.5	22,487
2	<b>Eating/drinking places</b> (581)	88,514	7.3	6,997	2	6.6	7,788
3	<b>Grocery stores</b> (541)	50,255	4.1	10,671	4	3.4	12,047
4	<b>Nursing/personal care</b> (805)	47,286	3.9	12,015	5	2.4	13,981
5	<b>Government offices</b> (913)	42,777	3.5	14,062	7	2.0	18,572
6	Hospitals (806)	41,006	3.4	19,917	3	3.9	24,161
7	<b>Hotels and motels</b> (701)	26,569	2.2	9,878	9	1.6	12,584
8	<b>Mens/boys clothing</b> (232)	24,872	2.1	12,714	25	.7	14,705
9	Banks (602)	23,868	2.0	22,291	12	1.3	23,091
10	<b>Amusement/recreation</b> (799)	18,335	1.5	12,611	14	1.1	13,498
11	<b>Gas stations</b> (554)	17,635	1.5	10,674	17	1.0	11,907
12	Trucking and courier (421)	17,464	1.4	21,067	10	1.6	24,714
13	Meatpacking (201)	17,141	1.4	15,817	11	1.4	19,986
14	<b>Department stores</b> (531)	15,545	1.3	11,352	6	2.0	12,216
15	Public safety (922)	11,930	1.0	20,289	13	1.3	27,359
16	Solid waste management (951)	11,345	.9	24,682	44	.5	28,274
17	Sawmills (242)	11,325	.9	18,725	22	.7	24,311
18	U.S. Postal Service (431)	11,257	.9	26,783	28	.6	30,625
19	Medical offices/clinics (801)	10,995	.9	30,364	15	1.1	42,290
20	<b>Farm wholesaling</b> (515)	10,978	.9	15,044	64	.3	18,758
21	Car dealers (551)	10,863	.9	23,171	18	.9	27,269
22	<b>Family services</b> (832)	10,807	.9	13,499	24	.7	15,386
23	Home health care (808)	10,049	.8	16,458	40	.5	16,678
24	Nondurable wholesaling (519)	9,988	.8	19,581	31	.6	21,533
25	Highway construction (161)	9,385	.8	20,963	29	.6	27,147

Note: Industries with average earnings per job in low-wage counties below the four-person poverty threshold are in bold.

Source: Prepared by ERS using data from the Bureau of Labor Statistics.

Table 3

## Educational attainment in low-wage and other rural counties, 1990

*Low-wage counties have larger shares of adults without a high school diploma than other rural counties, with the largest differences in the rural South*

Location	Less than high school	High school	Some college	College degree	Total
Percent					
All rural:					
Low-wage	35.4	34.4	19.2	10.8	100
Other	30.7	34.9	21.3	12.9	100
Midwest:					
Low-wage	29.2	38.3	21.0	11.3	100
Other	26.0	39.6	22.0	12.2	100
South:					
Low-wage	43.2	31.5	15.9	9.1	100
Other	38.3	31.7	18.5	11.3	100
West:					
Low-wage	22.9	32.2	28.0	16.7	100
Other	22.9	31.1	29.5	16.3	100

Source: Calculated by ERS using data from the 1990 Census of Population.

Both absolute and relative education levels in low-wage counties depend largely on location. Southern rural counties have the highest rate of adults without high school degrees. The very high rates in southern low-wage counties—43 percent in 1990—are only 5 percentage points above the rest of the rural South. In the West, low-wage and other rural counties exhibit no differences in education levels; the high school dropout rate for both types of counties in the rural West (29 percent) is lower than that for non-low-wage counties in the rural South (38 percent).

### Most Low-Wage Counties Are Not Persistently Poor, Except in the South

The distinctive geographic patterns of low-wage counties suggest that regional concentrations of poverty and low earnings are related, but not synonymous. While low-wage areas overlap substantially with areas of persistent rural poverty, key differences are also evident. Only a third of all low-wage counties are also persistent poverty counties, as defined by the Economic Research Service, and slightly less than a third of persistent poverty counties are low-wage (fig. 4).

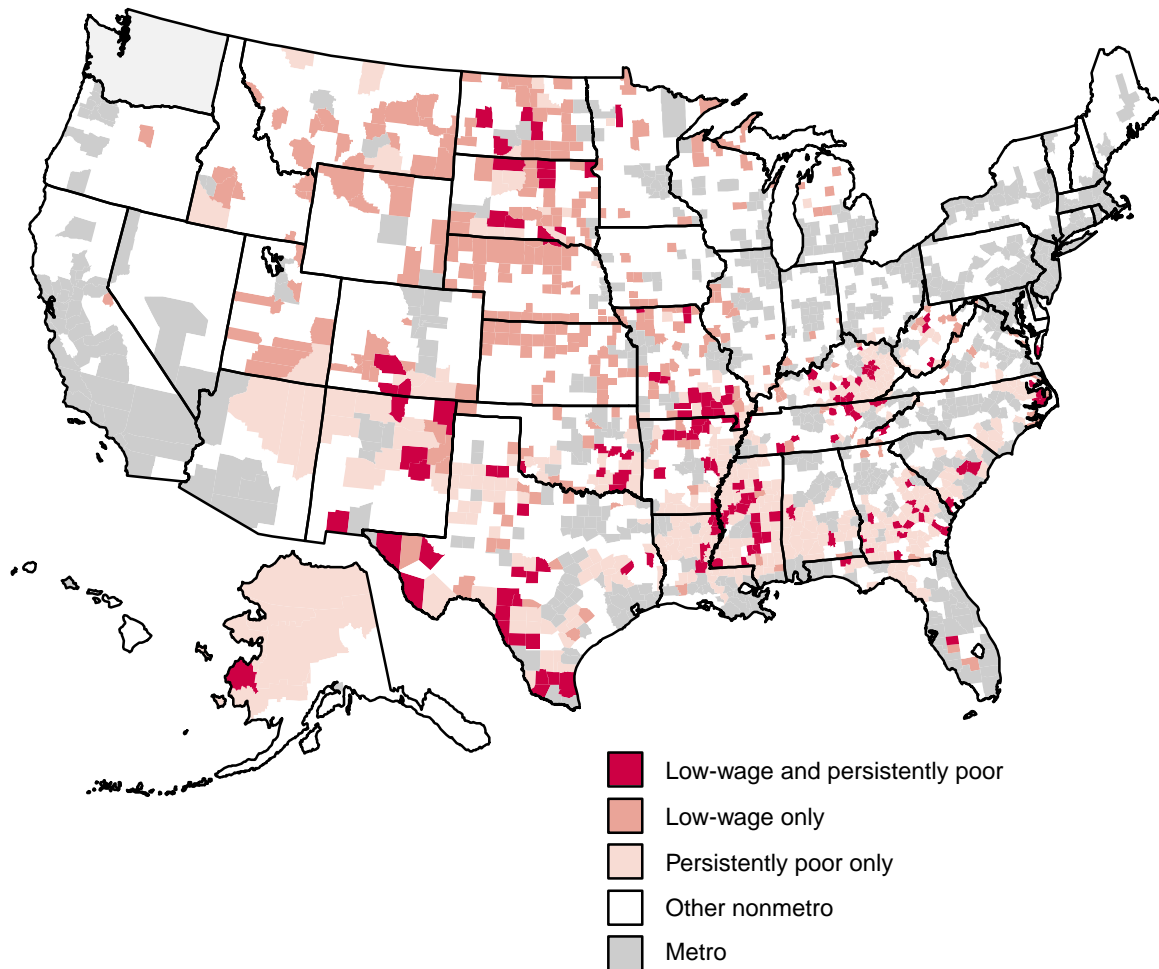
The relationship between low wages and persistent poverty varies sharply by region. In both the Midwest, which includes the Great Plains, and the West, only 14 percent of the low-wage counties are persistently poor, compared with well over half (61 percent) of low-wage counties in the South. These regional differences are not surprising, given the South's high incidence of persistent poverty overall. Nonetheless, most southern persistent poverty counties (three out of four) are not among the low-wage group, which suggests that the economic and social conditions associated with poverty and low pay differ.

Workers in the low-wage counties of the Midwest/Great Plains and the West may largely avoid poverty through strategies such as two-earner families or multiple jobs (combining farm and off-farm work, for example). Other residents with few alternatives to low-paying jobs often migrate elsewhere. By contrast, southern workers in low-wage counties may be less likely to employ such strategies, boosting county poverty rates relative to those in other regions. In addition, high poverty rates in the South are often closely associated

Figure 4

### Low-wage and persistently poor nonmetro counties

*Despite some overlap, low-wage and persistently poor nonmetro counties form largely distinct groups*



Source: Calculated by ERS using data from the Bureau of Labor Statistics.

with family structure and nonparticipation in the labor force. These latter characteristics only partly depend on the wage structure of local labor markets.

### Human Capital Needs of Low-Wage Counties Differ by Region

Economic activity in rural America has historically been rooted in an industrial and agricultural base generating large numbers of low-wage jobs. Although the 20th century witnessed a dramatic transformation of rural employment away from farming and resource extraction to manufacturing and services, a significant share of rural workers still receive low wages. The geographic concentration of low-wage work in specific regions and types of counties reflects the economic diversity of the Nation's rural counties. In rural areas in which people commute to nearby urban centers, the workforce has taken on many characteristics of relatively high-wage urban economies. In remote counties with smaller populations, low-wage work often comprises a majority of available jobs.

Small populations and remoteness remain the most salient features of low-wage counties at the end of the century. Yet the character of low-wage counties also depends critically



on broader regional forces. The South, West, and Midwest (including the northern Great Plains) present contrasting pictures of low-wage areas.

The Midwest/Great Plains presents the dominant picture of the low-wage county—a county that depends largely on capital-intensive farming. Workers in low-wage counties in the Midwest are generally well-educated, though with slightly lower high school completion rates than workers in non-low-wage counties. Small populations and remoteness are especially acute and constrain the number and kind of employers willing to locate or expand in these counties.

Low-wage counties in the South share low rates of high school completion and relatively low labor force participation with other counties in the region. Human capital development is a more pressing issue here than elsewhere. Although the economies of southern low-wage counties are more diversified than in other regions, they tend to appeal to employers seeking unskilled, low-cost, but relatively plentiful labor.

Conditions in low-wage counties in the West suggest a different set of forces at work. A minority of western low-wage counties, particularly those with large Hispanic or Native American populations, resemble the South with their low human capital levels. Instead, school completion rates in most western low-wage counties are as high as in the rest of the region; moreover, workers in these counties have even higher labor force participation rates and lower unemployment than their non-low-wage counterparts. Lower returns to education, rather than the lack of education, may play a key role in the West. In addition, many low-wage counties in the region are high-amenity counties, often characterized by a large number of seasonal, low-paying jobs in recreation-related industries, and by a relatively large number of residents willing to work for less in order to take advantage of the region's natural attractions.

The economic and social environments that give rise to low-wage areas will require closer scrutiny in the coming years, as Federal and State assistance policies shift from maintaining households to encouraging employment. The experiences of these counties may provide clues to help people find self-sustaining work where good-paying jobs, especially for less-educated workers, are difficult to find. At the same time, the nature of low-wage counties will inevitably change as the adult population in persistently poor (but not low-wage) counties moves toward greater labor force participation. *[Robert Gibbs, 202-694-5423, [rgibbs@ers.usda.gov](mailto:rgibbs@ers.usda.gov), and John B. Cromartie, 202-694-5421, [jbc@ers.usda.gov](mailto:jbc@ers.usda.gov)]*

## Nonmetro Population Growth Rate Recedes in a Time of Unprecedented National Prosperity

*Despite very favorable national trends in income and employment, the nonmetro population growth rate has steadily dropped since it momentarily exceeded the metro level in 1994-95. By 1998-99, the rate of population growth in nonmetro areas was less than half of that elsewhere, as the net inflow of newcomers from metro places dwindled.*

Last year's review of nonmetro population trends (*RCaT*, Vol. 9, No. 2), was titled "Nonmetro Population Rebound: Still Real but Diminishing." The trend since then might well be called "Still Real, but Diminishing Further." Two post-1990 trends are equally important to note: (1) nonmetro America as a whole had some net inmovement of people from metro areas throughout the decade in contrast with the 1980's, but (2) the amount of such gain in the second half of the decade was much reduced from its peak in 1994-95, with a number of nonmetro counties reverting to outmigration and population loss.

All told, the nonmetro population grew by 3.9 million, or 7.6 percent, from April 1990 to July 1999, compared with an increase of just 1.3 million, or 2.7 percent, during the entire 1980's. From the decade's point of view, a rebound in growth clearly occurred. All of the upward change in trend is the product of migration, for the annual rate of natural increase—the margin of births over deaths—slumped by a third in nonmetro counties during the 1990's. Net migration, however, shifted from an average annual outmovement of 269,000 in the 1980's to an average inmovement of 242,000 in the 1990's.

The demographic rebound affected most rural and small town sections of the country and almost every type of county. In some counties, it took the form of dramatic reversals from earlier loss to substantial gain; in others, it simply occurred as a reduced degree of loss. Its causes are not fully understood in every instance, but several factors are evident.

- The first half of the 1990's saw an improved nonmetro economic picture compared with that in metro places, as measured by both employment growth and unemployment levels.
- Further sprawl of population out from metro centers to adjacent nonmetro counties is visible on the ground and also reflected in the statistics, in a process of incipient suburbanization.
- Numerous more distant areas reported growth from the arrival of people moving to smaller-scale places for noneconomic, quality-of-life reasons. Some of these newcomers are conventionally retired, but more seem to be of working-age with families or are people who have retired early from a career but are still economically active.
- The growth of recreation activity and second homes has also played a role, along with the rejection of large-scale urban life, which for many resulted in "urban flight."

The rebound of the 1990's was less pronounced than that of the 1970's. Metro areas continued to have a somewhat higher rate of population increase than did nonmetro counties, with the exception of 1994-95. The higher metro rate of natural increase and disproportionate receipt of foreign immigrants produced the faster growth despite some net out-movement to nonmetro counties each year.

### Nonmetro Growth Turned Downward After 1995

But, as noted earlier, the pace of rural and small-town rebound lessened steadily after its peak from July 1994 to July 1995 (fig.1). During that time, the nonmetro population grew by 1.0 percent. In steady annual dropoffs thereafter, it fell to 0.5 percent in 1998-99. Metro growth in the same time frame rose somewhat from 0.9 percent to 1.0 percent. The non-metro downturn corresponded with a drop in nonmetro employment growth and a boom in the metro economy.

All types of nonmetro counties were affected by the reduction in population growth except for commuter counties—that is, those in which 40 percent or more of resident workers commuted to another county for work in 1990. Counties dependent on the two traditional

## Population and Employment

Table 1

### Regional population change, 1990-99

*The South had the largest regional nonmetro population gain; the West had the highest rate of change*

Region	Population			Population change		Net migration		Net migration rate	
	1990	1995	1999	1990-95	1995-99	1990-95	1995-99	1990-95	1995-99
	Thousands			Percent		Thousands		Percent	
United States	248,791	262,803	272,691	5.6	3.8	4,441	3,573	1.8	1.4
Nonmetro	50,906	53,419	54,780	4.9	2.5	1,480	758	2.9	1.4
Metro	197,885	209,385	217,911	5.8	4.1	2,961	2,815	1.5	1.3
Northeast	50,828	51,444	51,830	1.2	.8	-827	-452	-1.6	-.9
Nonmetro	5,267	5,377	5,399	2.1	.4	23	-5	.4	-.1
Metro	45,561	46,067	46,431	1.1	.8	-850	-447	-1.9	-1.0
Midwest	59,669	61,992	63,242	3.9	2.0	408	25	.7	0
Nonmetro	15,978	16,450	16,654	3.0	1.2	247	84	1.5	.5
Metro	43,691	45,542	46,588	4.2	2.3	162	-59	.4	-.1
South	85,456	91,778	96,468	7.4	5.1	3,220	2,521	3.8	2.7
Nonmetro	22,362	23,441	24,178	4.8	3.1	653	474	2.9	2.0
Metro	63,094	68,336	72,291	8.3	5.8	2,567	2,046	4.1	3.0
West	52,837	57,590	61,150	9.0	6.2	1,639	1,480	3.1	2.6
Nonmetro	7,299	8,150	8,549	11.7	4.9	557	205	7.6	2.5
Metro	45,539	49,440	52,601	8.6	6.4	1,082	1,275	2.4	2.6

Note: See appendix for definitions of regions.

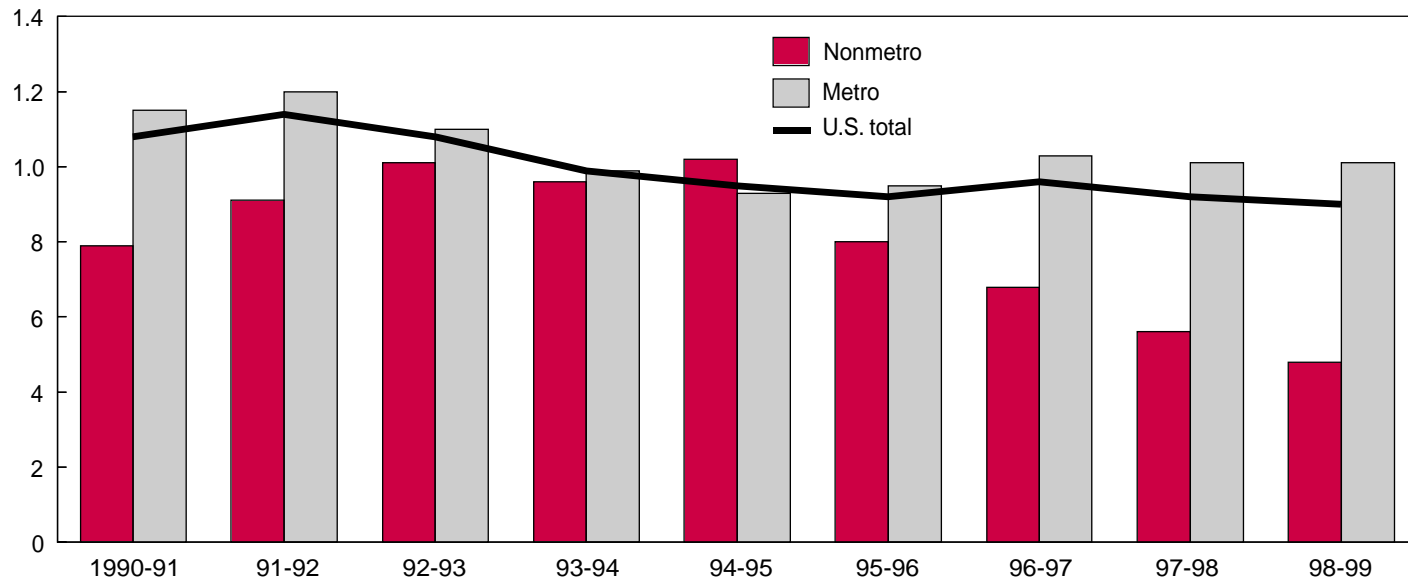
Source: Calculated by ERS using data from the Bureau of the Census.

Figure 1

### Annual population growth rates for metro counties, nonmetro counties, and the Nation, 1990-99

*The pace of nonmetro population growth in 1998-99 continues the slowdown that began after 1994-95*

Percent



Source: Calculated by ERS, using data from the Bureau of the Census.

rural industries of mining and farming had the greatest relative fall off in their pace of growth. (Note that the decline in farming counties predates the crisis period of oversupply, low commodity prices, and regional weather disasters that has prevailed since July 1999, the date of our last population estimates). The number of nonmetro counties with decreasing population rose from 600 in 1990-95 to 855 in 1995-99.

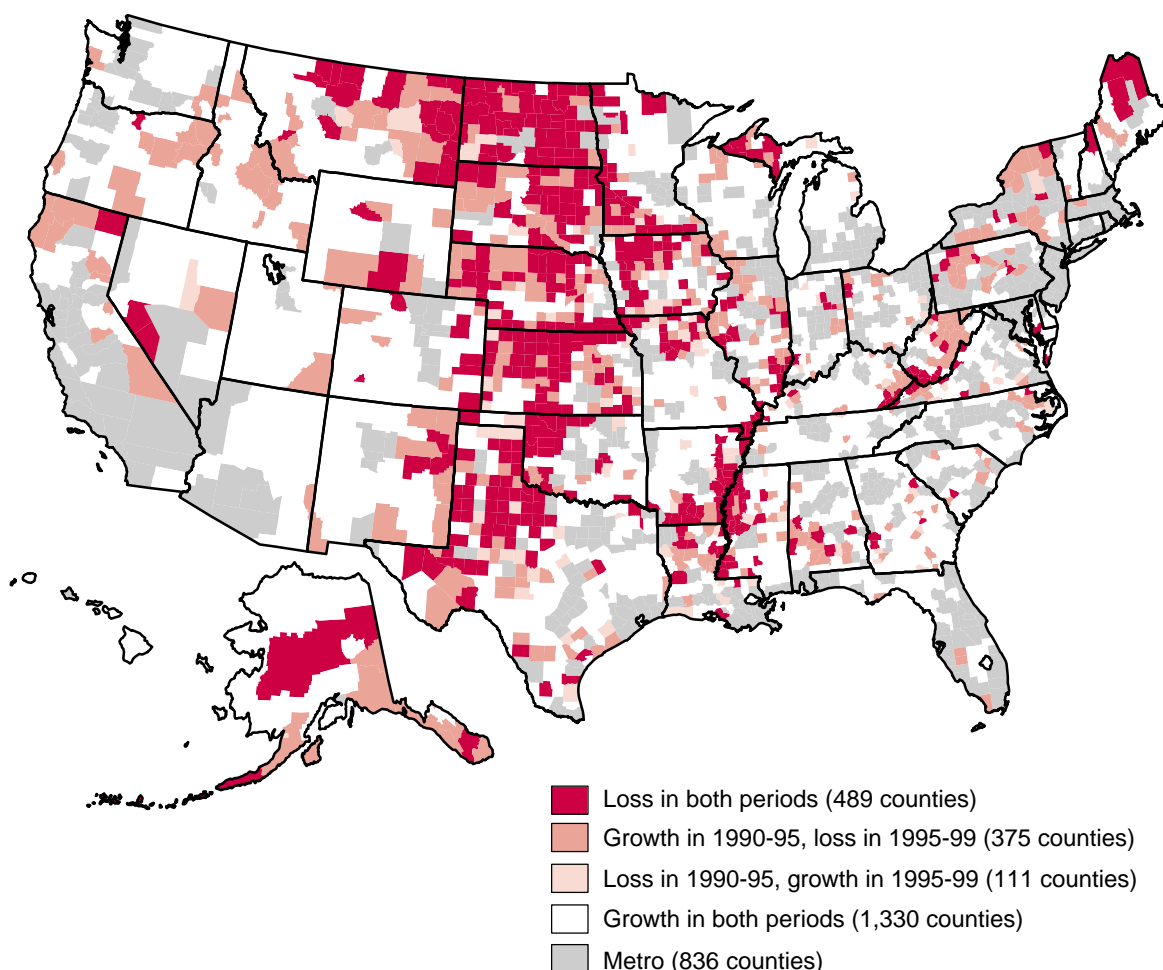
A curious feature of the 1995-99 period was that the diminishing pace of growth was also heavy in counties with high dependence on recreational activity. This occurred despite the unprecedented nonfarm prosperity and high discretionary spending power of the period and the attraction of recreation districts for people having the means and desire to relocate away from metro areas. Recreation counties still had an above average rate of population increase during 1995-99, with net immigration, but had a one-third reduction in annual growth rate, compared with 1990-95.

A map of growth trends reveals that 375 counties went from population gain to loss between 1990-95 and 1995-99 (fig. 2). Few regions were immune to such reversals. They were common, for example, in the Appalachian coal fields and in many counties of the Corn Belt and the Great Plains—areas still experiencing job losses in mining and farming. But, there were also areas of decline in western States, such as California, Idaho,

Figure 2

**Patterns in nonmetro population change, 1990-95 versus 1995-99**

*Some 375 widely distributed nonmetro counties reverted from growth to decline in 1995-99*



Source: Prepared by Economic Research Service, USDA, using data from the Bureau of the Census.

Montana, and Oregon, whose early 1990's nonmetro growth had been the source of popular attention. Florida is represented as well. Beyond the association of the recent period of diminishing nonmetro population growth with reduced nonmetro employment growth and improved metro conditions, a more complete explanation of the onset of the recent trend of reduced growth or new loss has not been deduced.

During the same 1995-99 period, 111 other counties had the opposite trend—a growing population after loss in the first half of the decade. These, too, are rather scattered, but with some frequency in the southern Corn Belt and central Texas. Individual events caused some of these recoveries, such as the opening of a prison after 1995, or recovery from an earlier military base closing. The limitations of making population estimates for very small counties may produce the results in some other counties, but the predominant picture of an overall sizable increase in the number of declining areas after 1995 seems reliable.

### **Nonmetro Counties Have Low Entry of Persons into Age Group 65 Years and Over**

The number of nonmetro counties with declining numbers of people 65 years of age or older continued to rise in 1998-99. Except as affected by immigration over the years, the population reaching age 65 was at its modern low in 1998, stemming from the low number of births in the early 1930's, the worst period of the Great Depression. Only 2.3 million births occurred in 1933, the lowest number in the entire 20th century. (In contrast, there were 3 million in 1921, the earlier high, and over 4 million in each baby-boom year from 1954 to 1964). The effect of the small birth cohorts of the early 1930's, coupled with extensive outmigration of many of their members from farming areas as young adults in the 1950's or as older adults more recently, contributed to over half (1,190) of all nonmetro counties having a decline in older population in 1998-99. Some 259 have seen the older population fall by 10 percent or more since 1990, a trend that is rare in metro counties. The popular impression that nonmetro counties have a higher than average proportion of older people is correct, but the absolute numbers of nonmetro elderly are now as likely to be falling as rising.

### **Low-Wage Counties Have Mixed Population Trends**

Population growth in low wage counties was modestly lower from 1990 to 1999 than in other nonmetro counties (6.8 percent vs. 7.7 percent). This stemmed from the very low natural increase of the low-wage group (just 1.7 percent compared with 3.4 percent in other counties). The low-wage counties actually had somewhat higher net immigration than all other counties (5.1 percent vs. 4.3 percent). Thus, prevalence of low-wage work has not been a prohibitive deterrent in itself to inmovement.

Low-wage counties proved to have less than 9 percent of the total nonmetro population, although by definition they accounted for 20 percent of all nonmetro counties. This relative sparsity of people is largely determined by the fact that nearly half of the low-wage counties are farming-dependent areas, many of which are thinly settled (see "Low-Wage Counties Face Locational Disadvantages," p. 18). Two-fifths of all farm-dependent counties are low wage areas, and had a distinctly lower rate of 1990's population growth (just 1.3 percent) than did the medium and higher wage majority (5.7 percent).

Because the low-wage farm counties are so very thinly settled (averaging just a little over 6,000 people each), they lack urbanization and the greater variety of work and frequency of well-paid jobs that urban settlement brings. Over three-fifths of these counties declined in population in the 1990's, often after decades of earlier decline as labor requirements in agriculture fell and offsetting sources of new nonfarm work failed to develop.

Excluding the farming-dependent areas, low-wage counties as a group exhibited a higher rate of population growth during the 1990's (8.6 percent) than did other nonmetro counties (7.3 percent), despite their low-wage status (derived from appendix table 1). All of the higher margin of growth is from net inmovement of people. Some of the growth occurs in low-wage counties that are adjacent to metro areas. In such cases, local low wages are no deterrent to people moving in who can commute to better metro work. Government-

dependent counties and transfer-payment counties are other types where the low wage counties have the higher growth.

The government-dependent counties have various functions. Some are college counties, some have military bases, prisons, or international border crossings, and many have national forests and parks. The difference in population change between the low-wage and other government counties can be accounted for by the high growth of several low-wage Mexican border counties and the negligible growth or outright decline of 10 average- to high-wage counties that had military base cutbacks or closings.

The largest types of transfer income by far are Social Security and other retirement payments. Counties with at least 25 percent of their personal income derived from transfer payments were classified as transfer-dependent. A number of these counties are comparatively poor, with some very poor. But if low wages are associated with relatively low costs of living, the transfer income goes further than it might elsewhere, and high dependence on such income has not precluded population inmovement. Many of the counties that rely heavily on this income are in the North Woods country of the Upper Great Lakes and the Ozark and Ouachita Mountains areas of the South, which are attractive to retirees.

Although low wages in rural and small town areas have for years been thought of partly in connection with transfer of routinized manufacturing operations from cities to nonmetro places, only 26 nonmetro manufacturing counties proved to be in the lowest wage quintile, or just 5 percent of the manufacturing group. With one exception, they were scattered around the South. They had a fast 10.6-percent population growth from 1990 to 1999, but were too few to have much influence on the overall change of the critical manufacturing group that contains 31 percent of the entire nonmetro population.

An interesting feature of nonmetro population change in low wage counties relates to diminishing nonmetro growth during 1995-99. Although a net of 264 more nonmetro counties slipped into decline in 1995-99 than there were in 1990-95, only 10 percent of them were low-wage counties. Population loss was still more common in the low-wage areas than elsewhere (47 percent incidence vs. 35 percent). But, their susceptibility to decline was only moderately greater during the downturn years after 1995 than before then. The middle- and high-wage counties that depended on manufacturing, government, or trade and services work were the most likely to have shifts in their economy or attraction to migrants that led to decline in the last half of the decade.

### **Conclusion**

It would be idle to think that low wages have no meaningful effect on the propensity of people to move to other places where work is better rewarded or where rewarding work is more available. But overall population change in nonmetro low-wage areas appears not to be fully determined by a conventional migration response to the economic problems of agriculture or other businesses. It is also clearly shaped in part by changes introduced by worker commuting and by the influx of people motivated by nonpecuniary concerns rather than by a desire to maximize income.

The overall trend of nonmetro population in the near future is conjectural at this point. Agriculture continues to undergo consolidation and productivity gains that lead to fewer workers and population loss in farming-dependent areas. The downward drift in nonmetro growth rate since 1995 cannot continue much longer without entailing an end to net inmovement from metro areas. The ever-widening perimeter of metro America, however, steadily brings more rural and small town areas into the outskirts of urban labor markets, changing their demographic future. And before the end of the new decade, the first cohorts of the post-World War II baby boom will reach early retirement age, with a probable significant impact on many rural communities. [Calvin L. Beale, 202-694-5416, [cbeale@ers.usda.gov](mailto:cbeale@ers.usda.gov)]

## Nonmetro Migration Drops in the West and Among College Graduates

*The nonmetro population continued to increase from net migration but at a much lower rate than in previous years. After leading other regions in the first half of the 1990's, the nonmetro West experienced a substantial drop in net migration during 1996-99. Metro-to-nonmetro migration among college graduates also dropped substantially, though not to the level of the rural brain drain of earlier decades. Net migration rates were higher for low-wage workers despite lower rates of in- and outmigration combined.*

**D**uring the 2-year period ending March 1999, 3.9 million people moved to nonmetro areas from metro locations, while 3.3 million moved out. The average annual gain of 281,000 people per year reflects continuing strength in the rural economy and in people's preferences for small-town living. The gain, however, is significantly lower than the 415,000 annual gain reported last year (*RCaT*, Vol. 9, No. 2) for the 2-year period ending March 1997. Annual population growth from net migration, including immigration from abroad, increased steadily during the early and mid-1990's, but dropped to half of 1 percent during 1997-99, according to the latest data from the Current Population Survey (see box, "About the Data").

Much of the recent decline in nonmetro net migration occurred among college graduates, who moved out in numbers almost equal to those moving in for the first time since the early 1990's. Regional changes accompanied the drop in migration among the well-educated, who contributed disproportionately to the high population growth in the West during the early 1990's. The nonmetro South and Midwest have become more popular migration destinations. Although high-income migrants had substantially higher rates of in- and outmigration, the two streams were close to equal in size, so that nonmetro areas gained more population among low-wage workers. Hispanics also had high nonmetro migration gains.

### Net Migration Losses Were Among Labor Force Entrants and Retirees

Over 14 percent of the nonmetro population changed homes each year in a variety of moves, ranging from strictly local to cross-country and even international relocations (table 1). Over half were within-county moves, many of which coincided with milestone life events, such as entering the labor market, getting married, and having children. Others moved between nonmetro counties, typically also a local move but often linked with a change in employment or educational pursuits. These moves begin and end in nonmetro

### About the Data

These migration statistics are from the Current Population Survey (CPS), conducted monthly by the U.S. Census Bureau for the U.S. Department of Labor. CPS derives estimates based on a national sample of about 60,000 households that are representative of the U.S. civilian, noninstitutional population. The sample is large enough to provide information on the demographic and economic characteristics of the nonmetro population at the national and regional level, but not generally at State or local levels. The March CPS contains a supplemental question asking respondents where they were living a year prior to the survey. Metro and nonmetro migration statistics are derived by comparing past to current residence.

This article uses 4 years of March CPS data, 1996-99, the only years with consistent, up-to-date metro and nonmetro residence classifications available. Prior to 1996, the CPS used a metro-nonmetro definition based on 1980 rather than 1990 census data. In this article, data are reported separately for each year for broad national and regional statistics and large subpopulations (figs. 1-2). For smaller groups (figs. 3-5), the latest two annual surveys were combined, providing data on migration during 1997-99, because combining surveys increases the reliability of the migration estimates.

Net migration is the small difference between two much larger migration streams—inmigration and outmigration—that are known to fluctuate year to year. In addition, estimates from the CPS can fluctuate even when actual net migration is stable. Therefore, readers should interpret nonmetro migration statistics with caution.

Table 1

**Average annual percentage of nonmetro residents who moved, by age, 1997-99**

*Nonmetro net migration loss during the early-adult years (18-24) and among retirees (65+) is offset by migration gains during early-career and family-formation ages (25-29)*

Mobility/migration status	Age group						All ages
	1-17	18-24	25-29	30-39	40-64	65+	
	Percent						
Total mobility of nonmetro residents <sup>1</sup>	17.2	29.7	26.1	15.9	8.7	3.6	14.4
Moved within same county	10.6	17.4	14.9	9.2	4.5	2.2	8.4
Moved between nonmetro counties	2.4	5.2	3.5	2.4	1.5	.6	2.2
Moved from metro to nonmetro	4.0	6.6	7.2	4.2	2.6	.8	3.6
Moved from abroad	.2	.6	.5	.1	.2	0	.2
Moved from nonmetro to metro	3.1	8.2	6.2	3.6	2.1	1.0	3.3
Net migration from metro to nonmetro	.9	-1.6	1.0	.6	.5	-.2	.3

<sup>1</sup>Total mobility is the percentage of current residents who moved during the previous year, whether within the same county, between nonmetro counties, or in from a metro area or abroad. Movement out of nonmetro areas is also expressed here as a percentage of current residents in order to calculate a consistent net migration rate.

Source: Prepared by ERS using data from the March 1997 and March 1998 Current Population Surveys.

areas and therefore do not affect overall nonmetro population numbers, but they contribute greatly to changing settlement patterns, which can shape local economic growth and contribute to fiscal problems.

Change to the nonmetro population came from those who moved each year between metro and nonmetro counties. Close to 2 million people moved into nonmetro areas each year during 1997-99, while the number of outmigrants jumped from roughly 1.6 to 1.8 million. Among those moving in, about 100,000 were immigrants, moving directly to nonmetro from foreign countries. New immigrants are a relatively small group in any given year, representing just 0.2 percent of the nonmetro population. They are regionally concentrated, however, in a few States such as Florida, Texas, and Arizona, and in specific counties in other States, and, thus, have significantly altered their local economies. (The Current Population Survey does not provide an estimate of annual emigration to countries outside the United States.)

Mobility is concentrated among young adults, who often require several moves to reach educational goals and gain work experience. Nearly 30 percent of 18-24 year olds living in nonmetro areas moved in the previous year, including 6.6 percent moving in from metro areas. But a larger number moved away, resulting in a 1.6-percent population loss overall for this age group. Leaving rural areas after high school for colleges and jobs in the big city is a well-established pattern, but a large proportion return home after a few years. Although not measurable with the data used here, return migration no doubt contributes to the large nonmetro net migration gains among 25-29 year olds; similarly high gains among children ages 1-17 indicate that a large share of younger working-age adults moving to nonmetro areas have already started families. Compared with the 31-percent mobility rate among 18-24 year olds, less than 4 percent of retirees moved in a given year during 1997-99. Like those entering the labor force, slightly more of them moved out of nonmetro areas, contributing to a marked decrease in overall population growth among nonmetro retirees during the 1990's.

### **Recent Slowdown in Nonmetro Migration Centered in the West**

New metro and nonmetro classifications based on 1990 data were fully incorporated into the Current Population Survey in 1996, so that 4 years of consistent data showing the



flows into and out of nonmetro areas are now available. The trends indicate a slowdown in nonmetro migration gains from 458,000 in 1995-96 to 170,000 in 1998-99 (fig. 1). Both the number of immigrants and outmigrants increased over the 3-year period, but the increase was higher among outmigrants, reflecting a booming metro economy with increasing employment opportunities for labor force entrants.

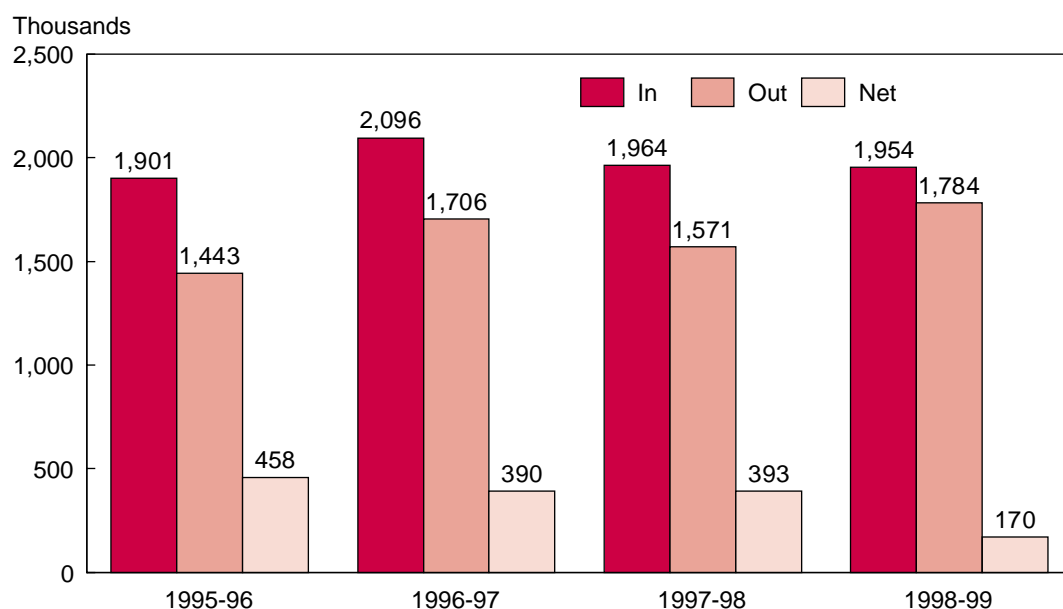
Unlike the 1980's when the rural economy faced a major recession with setbacks in agriculture and mining, net migration continued to be positive through 1999. This growth both reflects and enhances the economic advantages found in many rural locations that attract both people and jobs. These advantages were particularly attractive during the early 1990's when metro areas were harder hit and slower to recover from the economic recession. As large cities continue to prosper, we may expect continued increases in outmigration from nonmetro areas; however, prosperity also tends to increase nonmetro immigration, as more people have the discretionary income to act on preferences for a rural lifestyle.

The downturn in metro economies and the preference for high-amenity rural settings spurred growth to record levels in the nonmetro West through the mid-1990's. As late as 1995-96, the West led other regions in net migration gains by a large margin (fig. 2). Migration dropped dramatically in the following 3 years, at a time when metro areas throughout the West, especially in southern California (a major point of origin for migrants to other western States), were several years into a strong economic recovery. The emergence of net outmigration from the nonmetro West during 1997-99 is surprising given the continuing allure of the West's natural amenities. Other data (see "Nonmetro Population Growth Rate Recedes in a Time of Unprecedented National Prosperity," p. 27) indicate that the region is still receiving a small though rapidly diminishing surplus of migrants. The small population base in the nonmetro West, compared with other regions, lowers the precision of the population estimates derived from the Current Population Survey. We can safely say that the nonmetro population boom that drew much media attention, and prompted the description of a "new economy" emerging in the nonmetro West, has ended for now.

Figure 1

**Nonmetro in-, out-, and net migration, 1995-99**

*Nonmetro outmigration rose faster than immigration during 1995-99, lowering net migration*



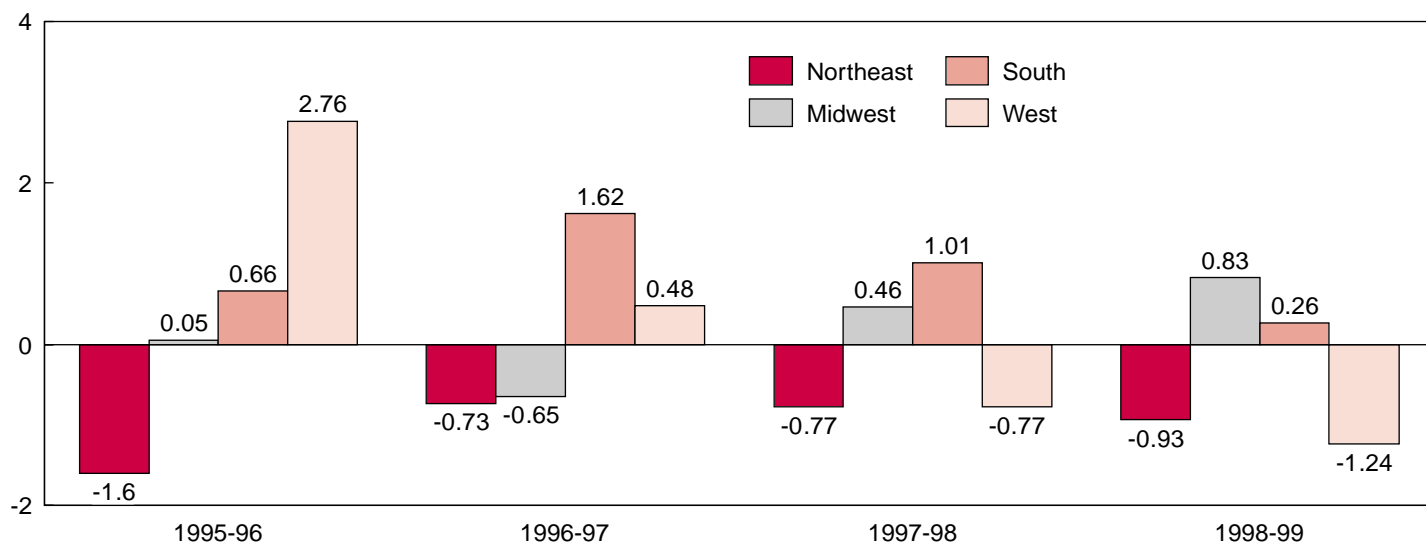
Source: Calculated by ERS using March 1996, 1997, 1998, and 1999 Current Population Surveys.

Figure 2

**Nonmetro net migration by region, 1995-99**

*Consistent net migration gains in the South mirrored losses in the Northeast; migration to the nonmetro West declined*

Percent



Source: Calculated by ERS using March 1996, 1997, 1998, and 1999 Current Population Surveys.

Net migration continued to rise in the South and Midwest during 1997-99, but consistently declined in the Northeast. The mirror image of positive migration in the South and negative in the Northeast partly reflects the continued attractiveness of sunbelt locations, a defining feature of U.S. migration since the 1950's.

**Net Immigration of College Graduates Slows**

One of the striking features of the rural recovery of the 1990's was the high educational composition of immigrants relative to outmigrants. In 1992, more college-educated people migrated into than out of nonmetro areas, ending a brain drain that characterized migration patterns in the 1980's and contributed to a large rural-urban education gap (see "Rural-Urban Migration Patterns Shift," *RCaT*, Vol. 6, No. 1, p. 11). The trend deepened through 1995-96, when net immigration of college graduates reached 1.4 percent, twice the rate for high school graduates. Since then, outmigration among the college educated declined, while high rates of immigration continued among those with less education (fig. 3). Net migration rates are now highest among people without a high school degree, reflecting a narrower range of options available to them in technology-driven urban job markets and, perhaps, the higher availability of low-skill work in nonmetro areas.

Net migration among the college educated dropped to near zero during 1997-99, but not below as it was during the 1980's, when net outmigration among this group reached 2 percent a year. Advances in transportation and telecommunications strengthened the linkages between rural and urban economies during the 1990's, making it easier for internet-based entrepreneurs and other high-tech firms to conduct business far from the urban customers they mostly serve. These and other economic restructuring trends, especially in rural manufacturing, have increased rural opportunities for the well educated and diminished the chances that the rural brain drain will resume.

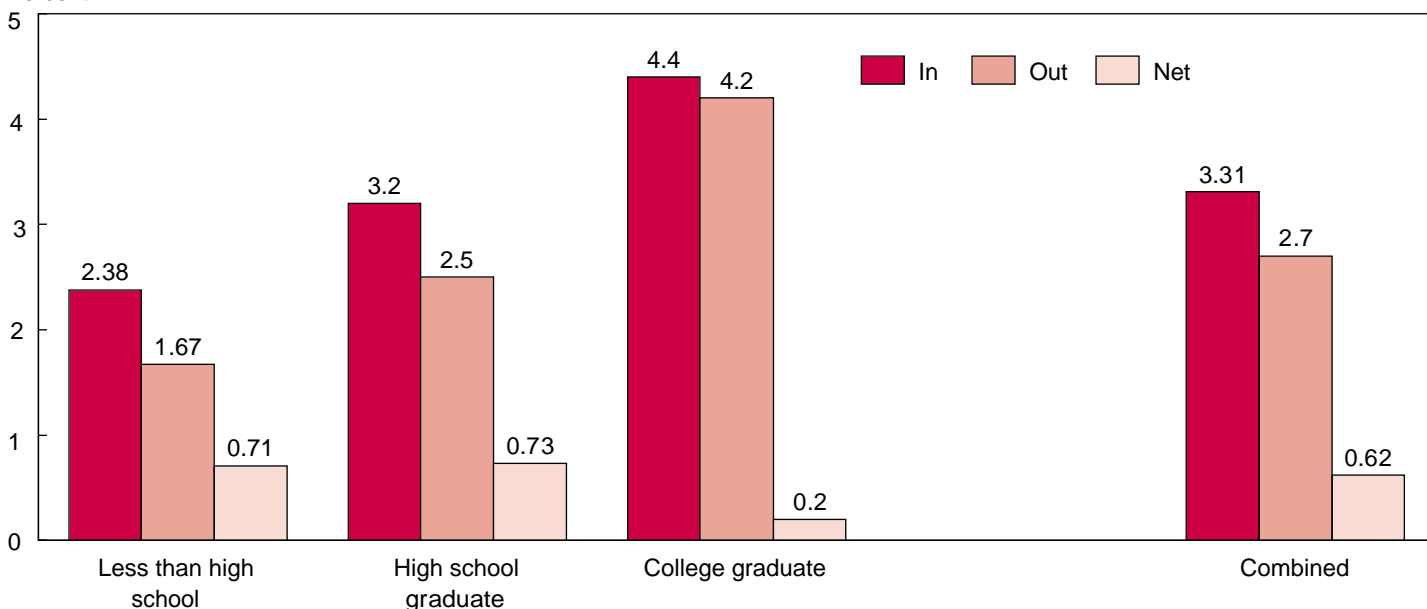
Although migration is notoriously difficult to predict, it would not be surprising to see migration to the nonmetro West and among the college educated rebound in the coming years. There is considerable overlap in the recent diminished growth in the nonmetro West and among those with college degrees, who can better afford high-amenity destina-

Figure 3

### Average annual migration rates to nonmetro areas, by education, 1997-99

*Nonmetro college graduates were highly mobile, but population gains were low*

Percent



Source: Calculated by ERS using March 1998 and 1999 Current Population Surveys.

tions found in the West than those with fewer educational credentials. Even migrants filling relatively low-skill jobs, such as in the booming retail sector, had much higher educational levels in the nonmetro West than elsewhere. According to a number of surveys, many migrants give up higher paying jobs in the city to live in high-amenity areas. Despite the drop-off in the past 2 years, this trend is likely to continue, shaping the course of rural economies in the coming years.

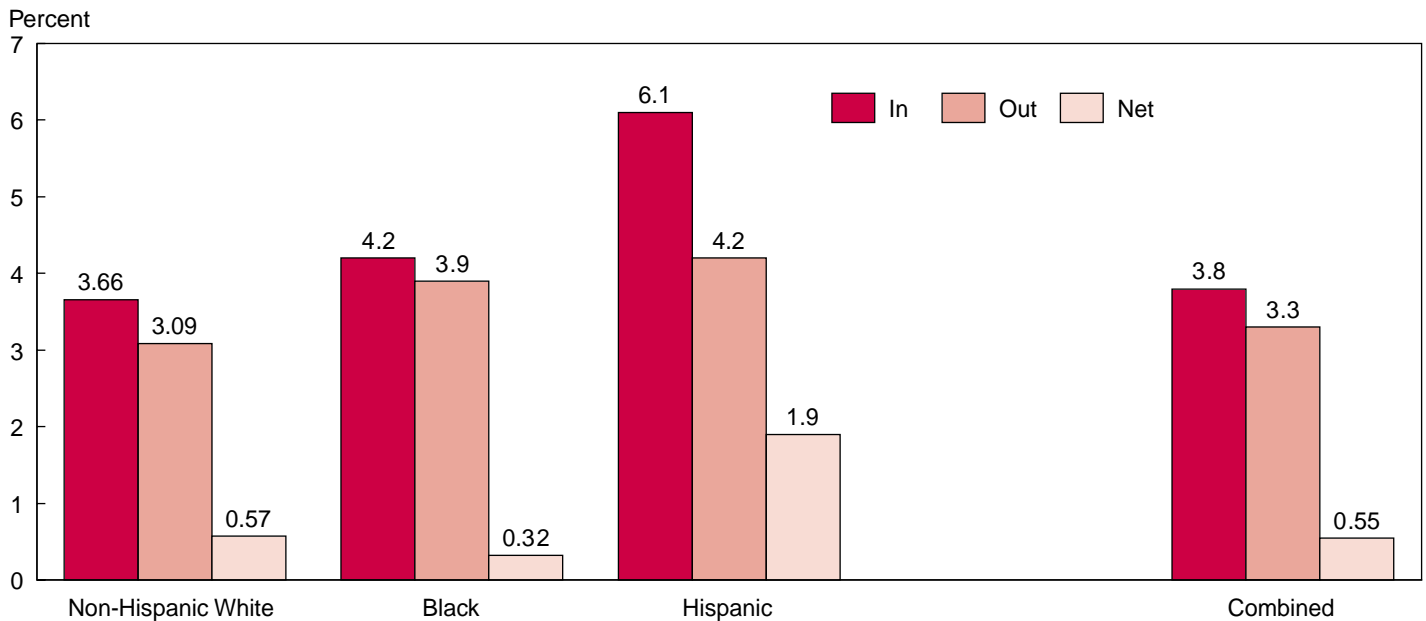
### Nonmetro Minorities Moving Mostly to High-Minority Areas

The presence of minorities in nonmetro areas is increasing incrementally due to positive rates of net migration (fig. 4). The data used here do not allow us to show migration origins and destinations at the county level, which differ considerably by race and ethnicity. Current migration continues to reinforce high minority nonmetro populations, in the southern Coastal Plains for Blacks and the Rio Grande Valley and other southwestern locations for Hispanics (see "Minority Counties are Geographically Clustered," RCaT, Vol. 9, No. 2, p. 14).

However, minority presence in other regions is increasing. Seventy percent of Blacks moving from metro to nonmetro areas in 1997-99 moved to the nonmetro South, compared with 85 percent just 2 years earlier, indicating some deconcentration for Blacks into other nonmetro regions. According to the Current Population Survey estimates during the last 2 years, as many Blacks moved from the metro South to the nonmetro South as in the opposite direction. If continued, this pattern would shift a historic trend, because for decades, Blacks, on balance, moved from the countryside to the South's urban centers.

Almost a third of the 6.1-percent inmigration among nonmetro Hispanics represents immigration from abroad. The outmigration stream does not include emigration to other countries, which the Current Population Survey does not record. Net migration among Hispanics, and to a lesser degree among non-Hispanic Whites and Blacks, is therefore somewhat overstated. Without the contribution of immigrants, nonmetro net migration

Figure 4

**Average annual migration rates to nonmetro areas, by race and ethnicity, 1997-99***Higher net migration rates for nonmetro Hispanics were mostly due to higher immigration*

Source: Calculated by ERS using March 1998 and 1999 Current Population Surveys.

gains among Hispanics would still be positive, but closer in magnitude to those of Blacks and non-Hispanic Whites.

**Net Migration Gains Higher Among Low-Wage Workers Despite Lower Mobility**

Net migration among low-wage workers (defined here as persons ages 25-64 earning full-time equivalent wages at or below the poverty line for a family of four) was close to 1 percent per year during 1997-99. It decreased steadily as income increased, approaching 0.25 percent for workers earning 300 percent or more above the poverty line (fig. 5). Nonmetro Hispanics earn less, on average, than Whites, so the strong correlation between low wages and high net migration during 1997-99 corresponds with minority migration patterns. However, the pattern held for White workers as well.

Migration is an important means of adjustment when economic restructuring, such as the loss of manufacturing jobs, or changing government policy, such as welfare reform, shift supply and demand in local labor markets. However, it is difficult to pinpoint why nonmetro areas have recently attracted low-wage workers disproportionately. At the very least, the higher migration suggests that competition for low-wage work in nonmetro areas did not increase rapidly during the mid-1990's, as some had predicted could happen with declining welfare caseloads. Competition is likely much higher in metro areas, where immigration from abroad has been higher.

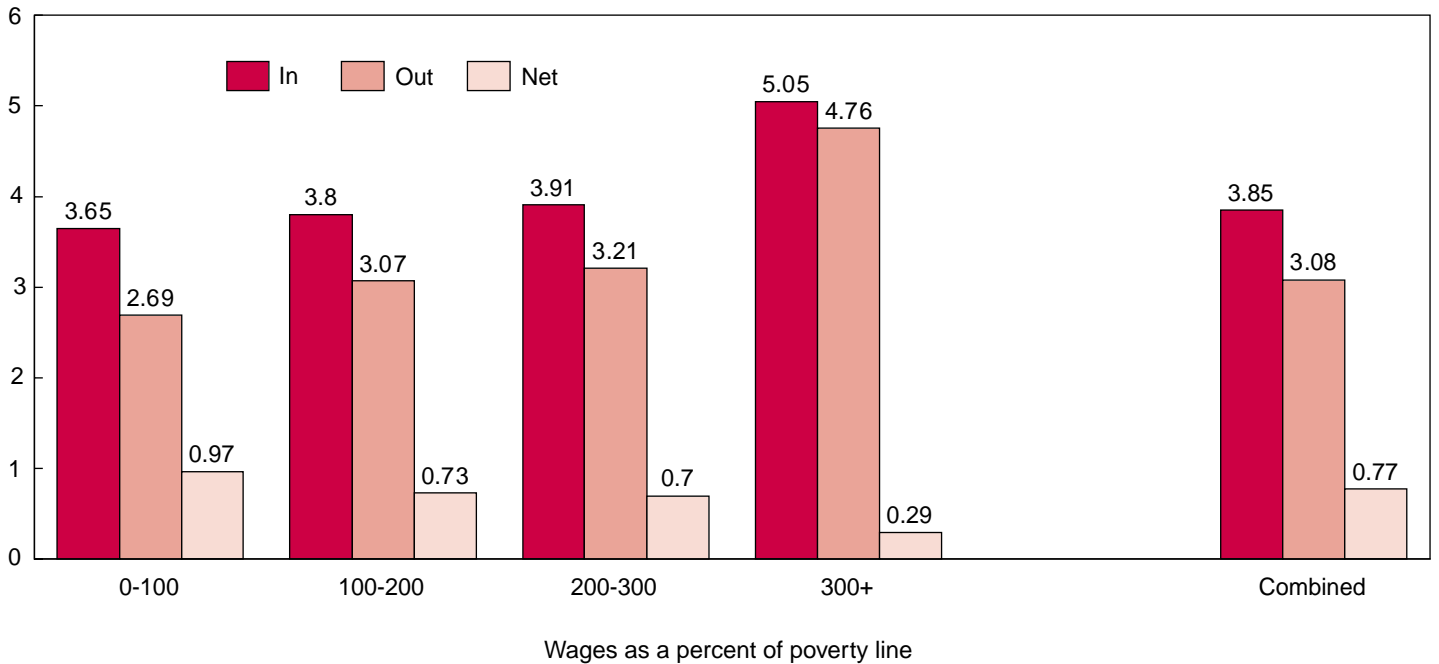
Higher immigration among low-wage workers also indicates that booming metro job markets, driven by growth in high-tech industries, are friendlier to migrants with education and experience. In addition, income often enhances a person's ability to migrate, so it is not surprising that, combined, in- and outmigration flows to and from nonmetro areas were much higher for workers in the highest income group. More high-wage workers had the resources to respond to opportunities and preferences in both nonmetro and metro locations. Even though nonmetro growth was small for this group as a whole, the process served to draw income out of some nonmetro areas and add it to others. [John B. Cromartie, 202-694-5421, [jbc@ers.usda.gov](mailto:jbc@ers.usda.gov)]

Figure 5

### Average annual migration rates to nonmetro areas, by wage level, 1997-99

*Net migration rates were higher for low-wage workers despite lower overall mobility*

Percent



Source: Calculated by ERS using March 1998 and 1999 Current Population Surveys.

## Nonmetro Employment and Unemployment Trends Remain Favorable

*Nonmetro employment continued to expand in 1999, although the nonmetro employment growth rate lagged behind the metro rate as it had since 1995. Unemployment rates continued to fall in both nonmetro and metro areas. These trends held consistently across the different regions of the country over the past several years. Employment growth in low-wage nonmetro counties was generally lower than in other nonmetro counties, although this trend was reversed in the early 1990's. Unemployment rates in low-wage counties have remained modestly above the nonmetro average.*

**A**fter 13 straight quarters where metro employment growth exceeded nonmetro growth, nonmetro growth edged ahead during the third and fourth quarters of 1998 (fig. 1). But metro growth again outpaced nonmetro growth throughout 1999. This is in marked contrast to the early 1990's, when nonmetro employment growth rates exceeded metro rates.

Employment grew more slowly in nonmetro areas for most Census divisions in 1998-1999 (fig. 2), continuing trends observed for 1995-98 (fig. 3). The slowest nonmetro employment growth rates over the past year were in the Middle Atlantic and East South Central States. Mountain and East South Central States showed the greatest lag of nonmetro growth behind metro growth.

### Employment Growth Rates Rose Across Nonmetro County Types in 1999

Between 1995 and 1998, annual nonmetro employment growth rates by county type ranged from 0.3 percent to 2.0 percent. Growth rates were minimal for agriculture, mining, manufacturing, persistent-poverty, and transfer counties (0.3-0.6 percent annually) and moderate for government, services, retirement destination, Federal land, and commuting counties (1.3-2.0 percent annually) (table 1).

In 1999, employment growth rates rose for most nonmetro county types. Employment growth remained minimal in mining counties (0.1 percent) and was more rapid in retirement counties (2.6 percent) than in other county types. Growth rates in all other county types ranged from 1.2 to 2.0 percent.

### Unemployment Fell in All Regions of the Country Between 1995 and 1999

Unemployment rates, at their lowest levels in more than 20 years in both metro and nonmetro areas in 1998, fell even further in 1999. Overall, unemployment fell by more than a percentage point in both metro and nonmetro areas since 1995, when the Nation's economic expansion was already several years old (table 2).

This decline in unemployment has been widely distributed geographically. Metro New England and the metro Pacific States saw the sharpest declines in unemployment (-2.3 percent and -2.1 percent, respectively), perhaps reflecting the recent prosperity of the high-tech sector. The Mountain West (-0.8 percent metro, -0.9 percent nonmetro) and the nonmetro West South Central States (-0.8 percent) had the smallest declines. Other regions saw unemployment rates decline between 1.0 and 1.8 percentage points.

Despite these declines in unemployment, geographic differences in unemployment are largely intact. The nonmetro unemployment rate remains about a percentage point above the metro rate, a differential which varies considerably by region. In both 1995 and 1999, the nonmetro unemployment rate was lowest in the West North Central States, where it fell from 4.4 percent to 3.3 percent; in both years, the rate was highest in the Pacific States, where it fell from 9.5 percent to 7.9 percent. Overall, the only changes in the relative ranking of nonmetro employment rates across the nine regions were those occasioned by the smaller declines in the Mountain and West South Central States.

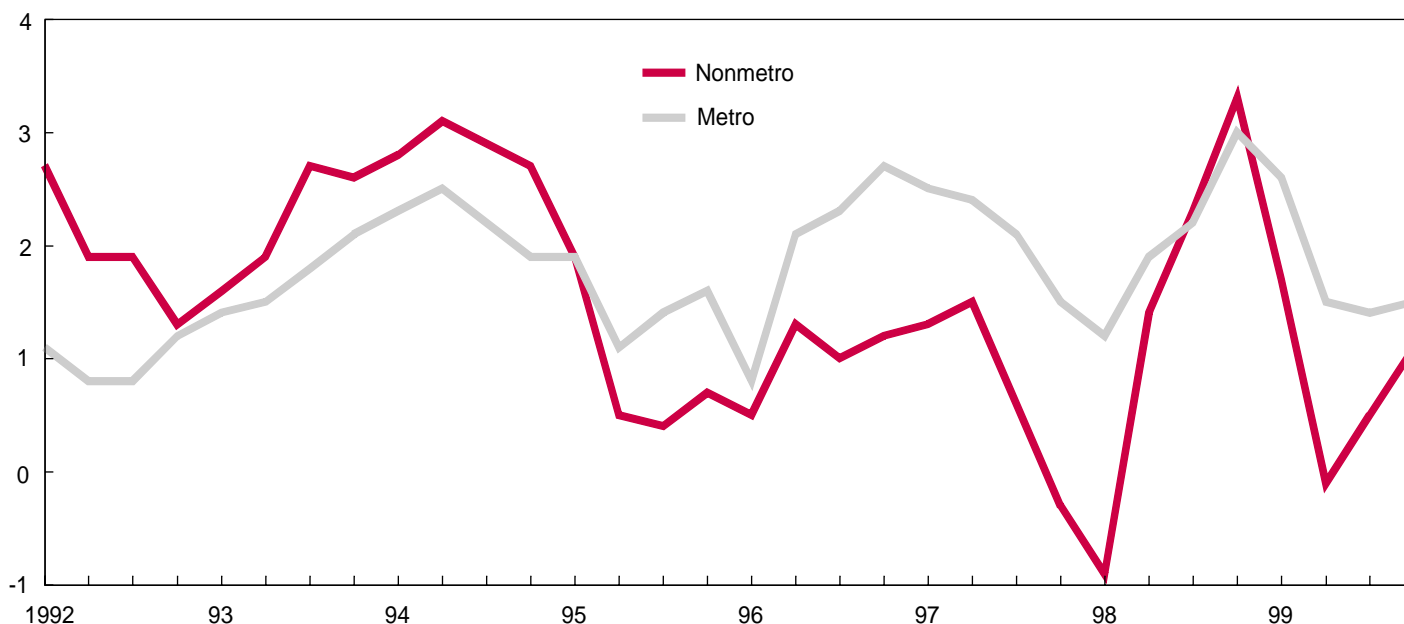
The distribution of counties with stable or increasing unemployment rates is also an indicator of breadth of the unemployment rate decline. Unemployment fell in more than 60 percent of nonmetro counties in each of the six county economic types and five county policy types between 1995 and 1999. It also fell in two-thirds or more of the nonmetro counties in each Census region, except the West South Central (table 3).

Figure 1

### Employment growth, 1992-99

*Metro employment growth continued to outpace nonmetro growth*

Percent



Note: Rate shown is quarterly, seasonally adjusted annualized percentage employment growth, from first quarter 1992 through fourth quarter 1999.

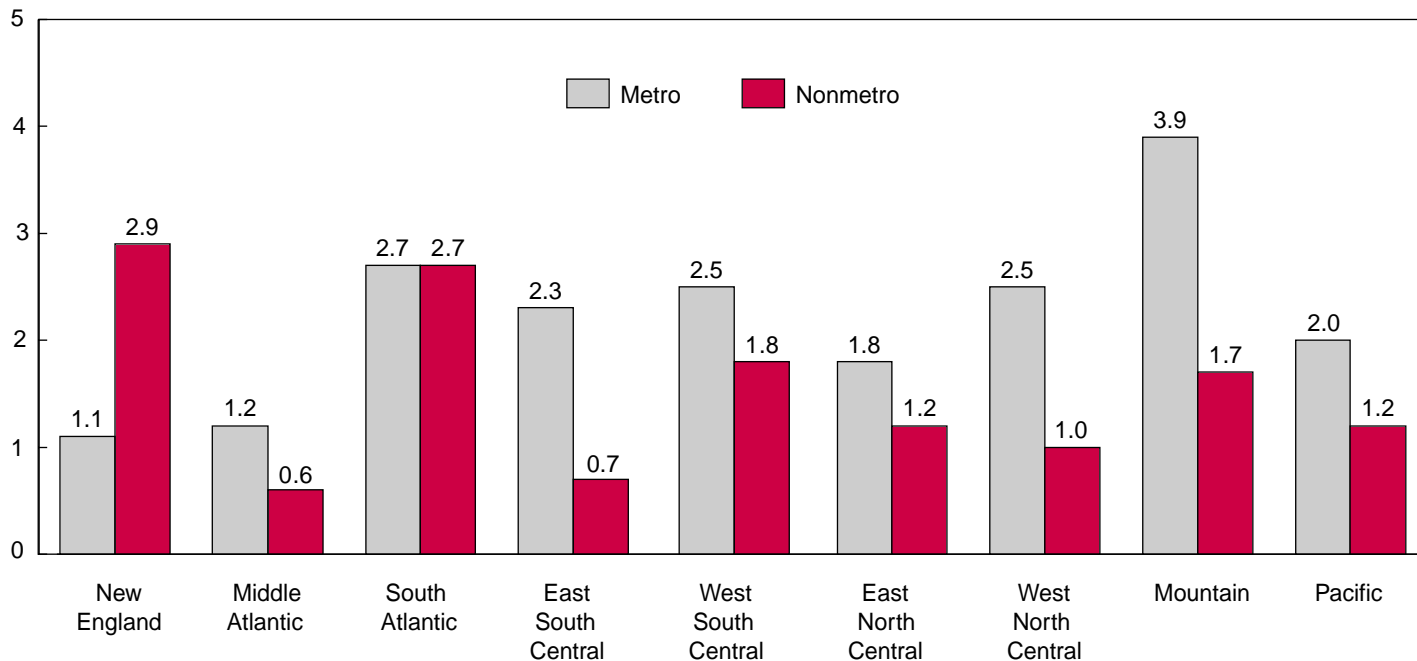
Source: Calculated by ERS from Bureau of Labor Statistics' Local Area Unemployment Statistics.

Figure 2

### Employment growth, by Census division, 1998-99

*Percent metro employment growth has been faster in most regions*

Percent

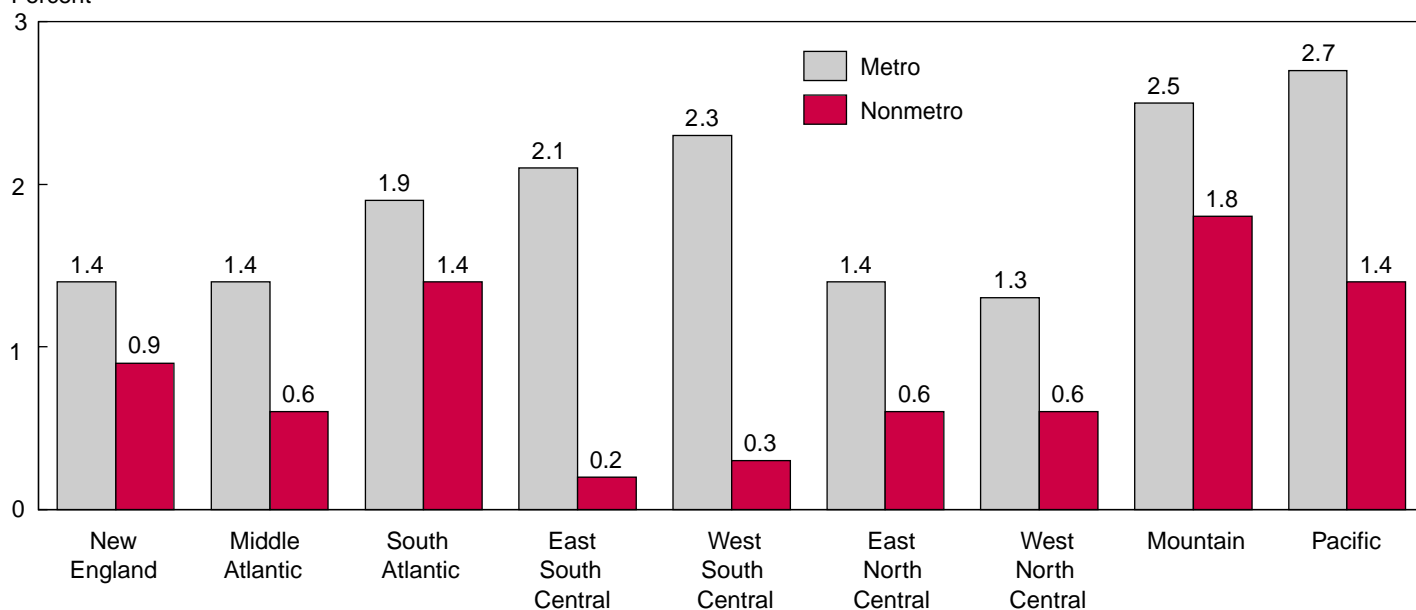


Source: Calculated by ERS from Bureau of Labor Statistics' Local Area Unemployment Statistics.

Figure 3

**Employment growth by Census division, 1995-98***Between 1995 and 1998, nonmetro growth lagged metro growth in all regions*

Percent



Source: Calculated by ERS from Bureau of Labor Statistics' Local Area Unemployment Statistics.

Table 1

**Employment growth in nonmetro areas, by county type, 1995-99***Employment growth for nonmetro county types rose in 1998-99*

Item	Annual growth rates		Change, 1995-99
	1995-98	1998-99	
	Percent		Percentage point
Metro	1.9	2.1	0.2
Nonmetro	.8	1.5	.7
County types:			
Agricultural	.3	1.2	.9
Mining	.6	.1	-.5
Manufacturing	.5	1.4	.9
Government	1.3	1.9	.6
Services	1.3	1.9	.6
Nonspecialized	.9	1.6	.8
Retirement	2.0	2.6	.6
Federal lands	1.5	1.7	.2
Commuting	1.4	2.0	.6
Persistent poverty	.5	1.5	1.0
Transfers	.6	1.4	.8

Source: Calculated by ERS from Bureau of Labor Statistics' Local Area Unemployment Statistics.



## Population and Employment

Table 2

### Unemployment by Census divisions, metro and nonmetro, 1995 and 1999

*Unemployment declined in both metro and nonmetro areas in recent years*

Area	1999		1995		Change, 1995-99	
	Metro	Nonmetro	Metro	Nonmetro	Metro	Nonmetro
	Percent				Percentage point	
U.S. total	3.9	5.1	5.4	6.3	-1.5	-1.3
Census divisions:						
New England	3.1	3.4	5.4	5.2	-2.3	-1.8
Middle Atlantic	4.7	5.7	6.1	7.0	-1.5	-1.3
South Atlantic	3.4	5.2	4.8	6.5	-1.4	-1.4
East South Central	3.3	5.6	4.7	7.0	-1.4	-1.4
West South Central	4.2	5.8	5.7	6.7	-1.5	-.8
East North Central	3.6	4.6	4.6	5.9	-1.0	-1.3
West North Central	2.5	3.3	3.6	4.4	-1.1	-1.2
Mountain	3.5	5.6	4.3	6.5	-.8	-.9
Pacific	5.0	7.9	7.2	9.5	-2.1	-1.6

Source: Calculated by ERS from Bureau of Labor Statistics' Local Area Unemployment Statistics.

Table 3

### Nonmetro counties with declining unemployment rates, 1995-99

*Declining unemployment rates were the norm in all groups of nonmetro counties*

Counties	Declining rate	Steady or rising rate
	Percent	
Metro	94.9	5.1
Nonmetro	79.1	20.9
Nonmetro by Census division:		
New England	97.3	2.7
Middle Atlantic	91.4	8.6
South Atlantic	82.2	17.8
East South Central	83.0	17.0
West South Central	63.6	36.4
East North Central	85.8	14.2
West North Central	81.0	19.0
Mountain	77.6	22.4
Pacific	73.4	26.6
County type:		
Agricultural	72.1	27.9
Mining	60.5	39.5
Manufacturing	81.0	19.0
Government	84.7	15.3
Services	85.1	14.9
Nonspecialized	83.4	16.6
Retirement	85.3	14.7
Federal lands	78.9	21.1
Commuting	86.3	13.7
Persistent poverty	74.6	25.4
Transfers	80.6	19.4
Nonmetro by low-wage:		
Low-wage	75.9	24.1
Other	79.9	20.1

Source: Calculated by ERS from Bureau of Labor Statistics' Local Area Unemployment Statistics.

Unemployment rates did not decline in some areas, however. Clusters of counties with stable or rising nonmetro unemployment rates appeared in the coastal plains of Georgia, south-central Kentucky, Mississippi, Arkansas, Illinois, the northern Great Plains, western Texas, New Mexico, Oregon, and Alaska (fig. 4).

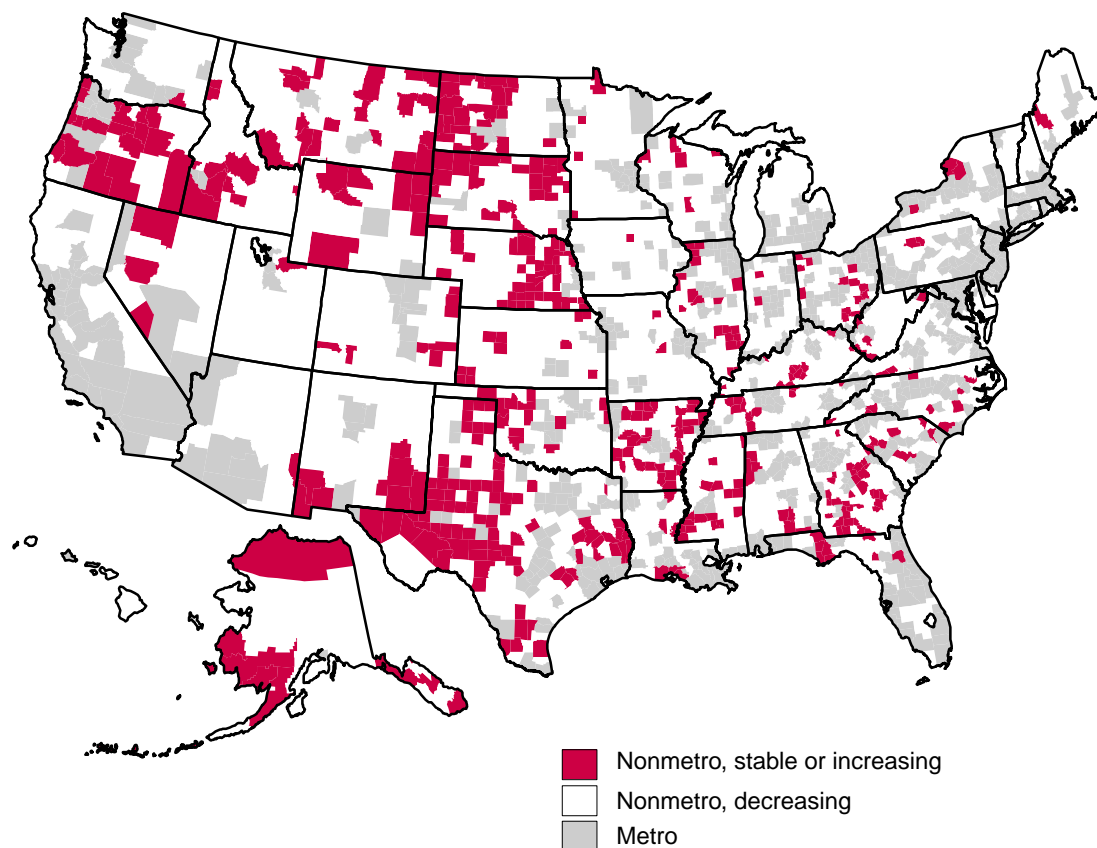
In the northern Plains, the unemployment rate increases were mostly small, the base level of unemployment was relatively low, and the areas affected were mostly sparsely populated, limiting the importance of these increases. The numbers affected by unemployment increases were somewhat greater in the rural South and Southwest and in Oregon.

These clusters were not dominated by any particular county economic type. While unemployment was more likely to increase in farming, mining, persistent-poverty, and low-wage counties than in other counties, it also rose in about 15 percent of the nonmetro counties outside all these categories. Many observed increases in unemployment rates may reflect local factors, such as plant relocations.

Figure 4

**Change in nonmetro unemployment, 1995-99**

*Unemployment increased in many nonmetro counties in the upper Great Plains and South Central States*



Source: Calculated by ERS from the Bureau of Labor Statistics' Local Area Unemployment Statistics.

### Low-Wage Counties' Employment Growth Outpaced Nonmetro Average in Early 1990's

Employment growth trends in nonmetro low-wage counties have generally moved with employment growth trends in nonmetro areas as a whole (fig. 5). Compared with all nonmetro areas, employment growth was slower in these low-wage counties in the latter half of the 1980's and again in the latter half of the 1990's.

However, employment growth in these counties equaled or outpaced growth in all nonmetro counties during the early 1990's. This faster growth partly reflected relatively strong growth in farming-dependent counties during the early 1990's—these counties account for one-third of all low-wage county employment. It also reflected relatively strong growth in low-wage counties relative to higher wage counties in the government-dependent, service-dependent, and retirement-destination categories.

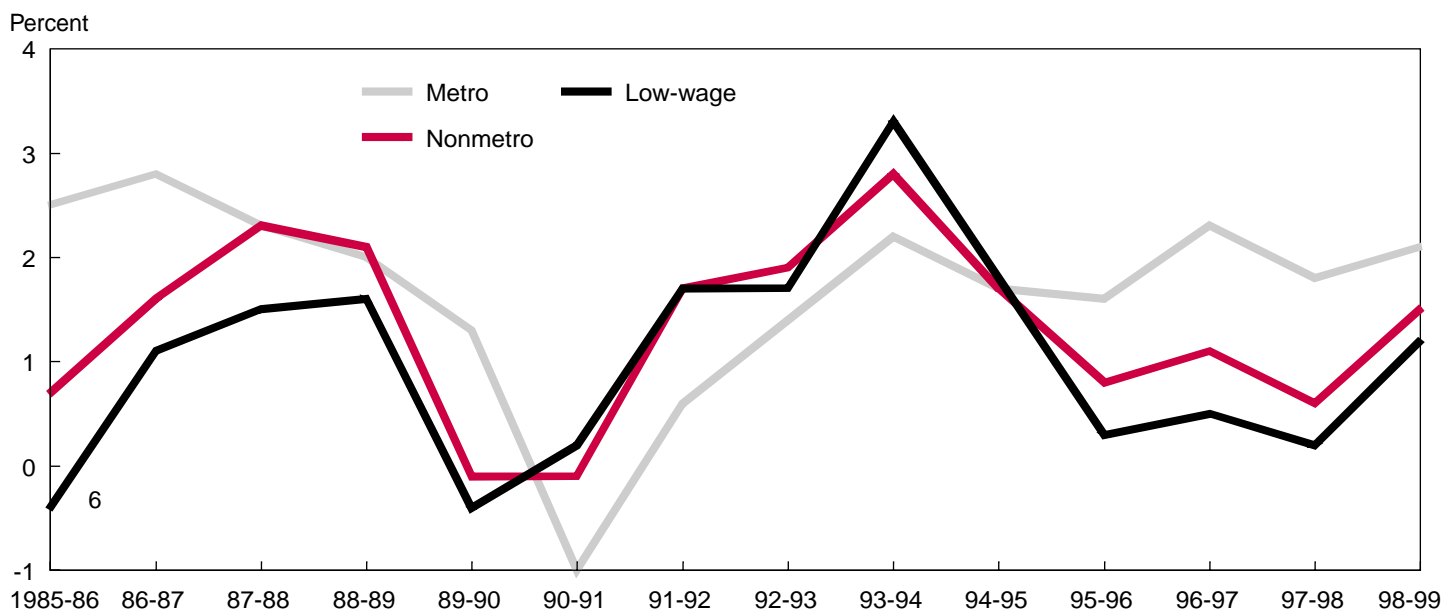
During this period, overall nonmetro employment growth outpaced metro employment growth, suggesting that factors favoring nonmetro areas in the early 1990's operated with particular force in low-wage counties. One factor might be that many firms downsized their white-collar workforces, which tended to be in metro areas and in higher wage counties in nonmetro areas.

The lag in employment growth in low-wage counties during the late 1990's can be seen across several county economic types (fig. 6). The lag is most pronounced in farming- and manufacturing-dependent counties, but is also observed in service-dependent and non-specialized counties. Employment in government- and mining-dependent counties grew at a faster pace when these were also low-wage counties, but these county economic types account for less than one-fifth of nonmetro employment.

Figure 5

#### Employment growth, by metro, nonmetro, and low-wage county status, 1985-99

*Employment growth in low-wage counties has been below the nonmetro average since 1994-95*

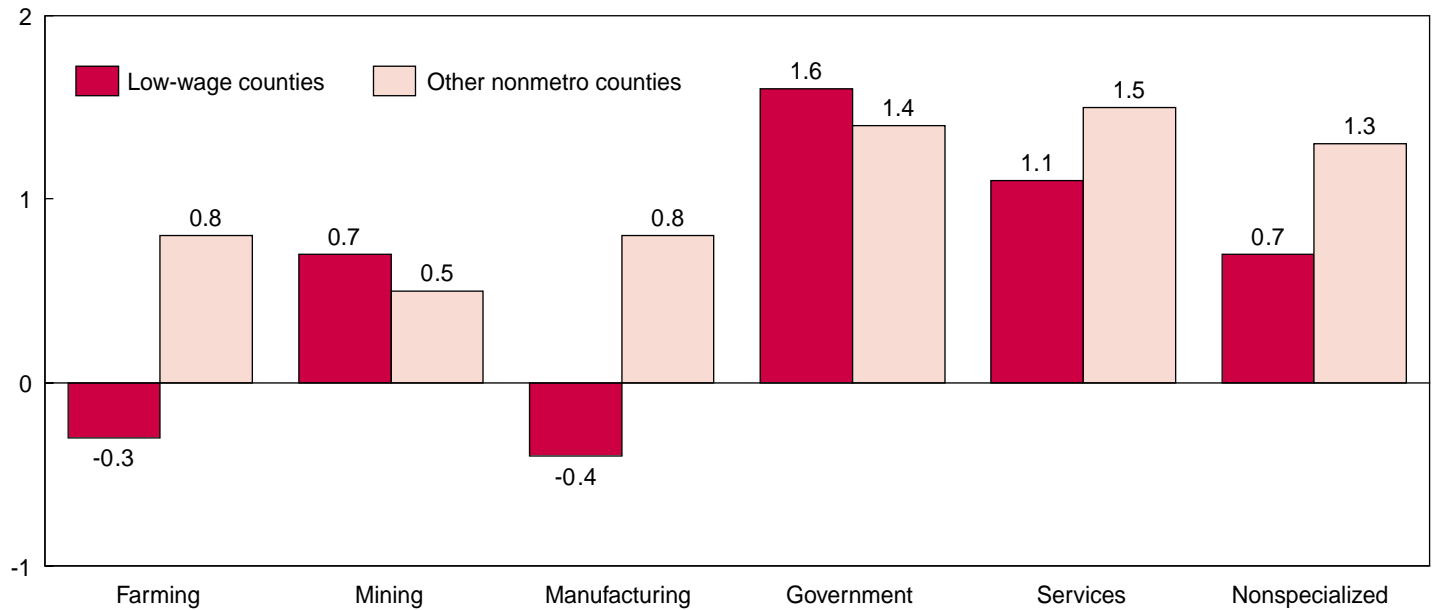


Source: Calculated by ERS from Bureau of Labor Statistics' Local Area Unemployment Statistics.

Figure 6

**Annual average nonmetro employment growth, by county economic type and low-wage status, 1995-99***Taking county economic types into account, employment growth rates are mostly lower for low-wage counties*

Percent



Source: Calculated by ERS from Bureau of Labor Statistics' Local Area Unemployment Statistics.

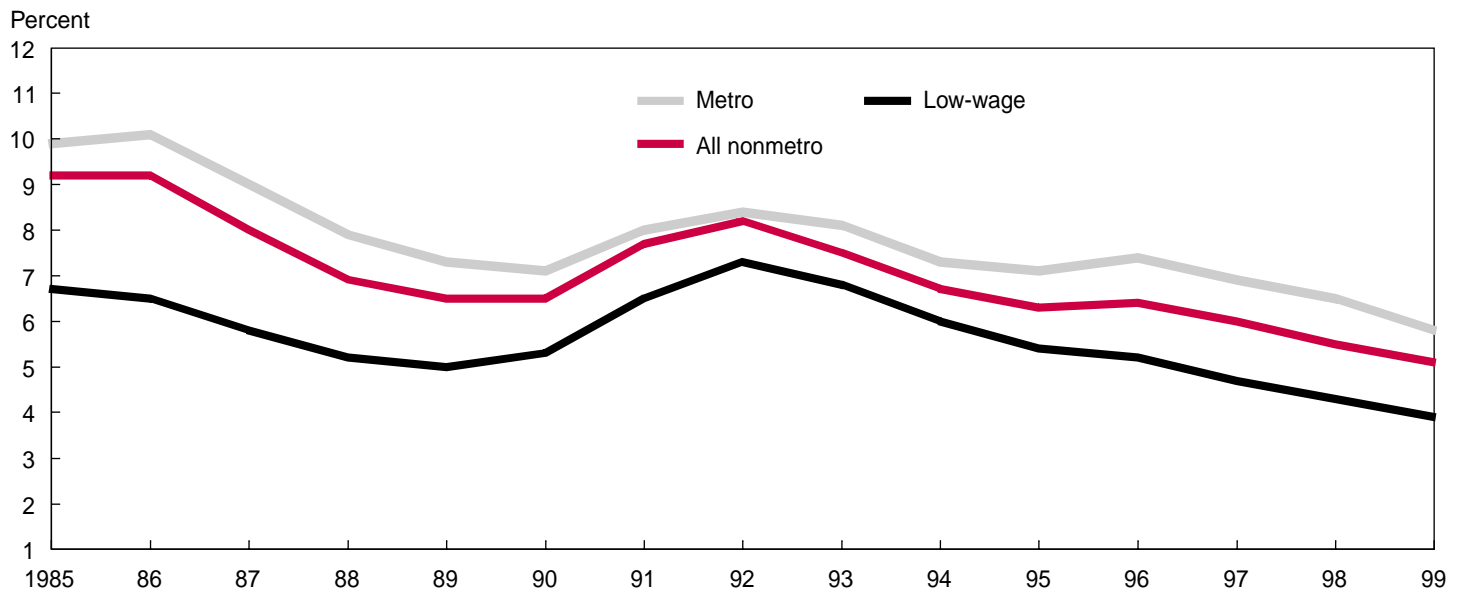
**Unemployment Rates Are Slightly Higher in Low-Wage Counties**

Unemployment in low-wage counties has been somewhat higher than unemployment in all nonmetro counties since at least the mid-1980's. The difference is not large—between 0.6 and 1.0 percentage point in most years (fig. 7). The gap was smallest in the early 1990's, consistent with relatively strong employment growth for low-wage counties in that period. [Lorin Kusmin, 202-694-5429, [lkusmin@ers.usda.gov](mailto:lkusmin@ers.usda.gov)]

Figure 7

### **Metro, all nonmetro, and low-wage unemployment rates, 1985-99**

*Unemployment rates in low-wage counties are somewhat above the nonmetro average*



Note: Values are annual averages.

Source: Calculated by ERS from Bureau of Labor Statistics' Local Area Unemployment Statistics.

## Almost Half of Hired Farmworkers 25 Years and Older Earn Poverty-Level Wages

*The demographic characteristics of hired farmworkers have changed little during the 1990's. These workers continue to earn about 58 percent as much as all wage and salary workers. About 45 percent of all hired farmworkers 25 years and older are low-wage earners who earn less than the poverty threshold for a family of four. Over one-third have annual family incomes of less than \$15,000.*

**H**ired farmworkers accounted for less than 1 percent (840,000) of all wage and salary workers in 1999. They made up one-third of the farm workforce, yet this proportion understates their contribution to the total farm production process. Hired farmworkers provide the labor at critical production times when operators and family members are unable to supply the necessary labor. Hired farmwork is often seasonal, is usually performed outdoors, involves lifting and carrying heavy objects, and pays substantially less than most other occupations. The overwhelming share of hired farmworkers (82 percent) work at planting, cultivating, and harvesting crops or tending to livestock. Smaller numbers are employed as farm managers (9 percent), supervisors of farmworkers (5 percent), and nursery workers (4 percent).

### Demographic Characteristics of Hired Farmworkers Change Little

The size of the hired farm labor force in 1999 was 40,000 (or 4 percent) fewer than for the previous year (app. table 5). Demographic groups with larger than average decreases included men (8 percent), white non-Hispanic workers (7 percent), workers ages 25-34 (13 percent), workers with fewer than 9 years of education (20 percent), and workers employed in the Northeast. Women had the largest increase between 1998 and 1999.

Compared with all wage and salary workers, hired farmworkers are predominately male, Hispanic, young, never married, less educated, noncitizens, and located in the South and West census regions (table 1). Many of these differences persisted throughout the 1990's, although some changes, such as the increase in Hispanic farmworkers, most likely resulted from CPS survey design changes in 1994. Since 1994, neither the number nor percentage of hired farmworkers who reported they are not U.S. citizens changed significantly. The percentage of hired farmworkers has decreased in the South, increased significantly in the West since 1994, and stayed the same in the Northeast and Midwest (app. tables 5 and 6).

### Hired Farmworkers' Family Incomes, Earnings Lag Most Other Occupations

Hired farmworkers have slightly lower family incomes than all wage and salary workers. About 64 percent of hired farmworkers had family incomes of less than \$30,000 in 1999, compared with 36 percent of all wage and salary workers (table 2). Even more striking, almost 68 percent (451,000 of 668,000 workers) of full-time hired farmworkers, those who usually worked 35 or more hours per week, had family incomes of less than \$30,000 in 1999.

The median weekly earnings of all hired farmworkers (\$280) were about 58 percent of the median weekly earnings of all wage and salary workers (\$479) (table 1). The median weekly earnings for full-time hired farmworkers (\$320) were also about 58 percent of those for all full-time wage and salary workers (\$550) (app. tables 5 and 6). Full-time hired farmworkers earned less than those in most occupations, except for private household and other nonprotective services (fig. 1).

### Most Hired Farmworkers Are Low-Wage Workers

Low-wage workers are defined here as those 25 years of age and over whose earnings, on a full-time full-year equivalent basis, fall below the official U.S. weighted average poverty threshold for a family of four (\$17,028). In 1999, there were 585,000 hired farmworkers 25 years and older, about 47 percent of whom earned low wages. The percentage of full-time hired farmworkers with low wages was higher than in other occupations, except for private household and other nonprotective services (fig. 2).

## Population and Employment

Table 1

### Demographic and earnings characteristics of hired farmworkers and all wage and salary workers, 1999

*Almost all demographic characteristics of the hired farm workforce differ from those of all wage and salary workers*

Characteristics	Hired farmworkers		All wage and salary workers	
	Thousands	Percent	Thousands	Percent
All	840	100	119,130	100
Gender:				
Male	678	80.7*	61,986	52.0
Female	162	19.3*	57,144	48.0
Race:				
White	425	50.6*	87,100	73.1
Hispanic	361	43.0*	12,852	10.8
Black and other	54	6.4*	19,178	16.1
Education completed:				
0-4 years	95	11.3*	831	.7
5-8 years	189	22.6*	3,246	2.7
9-11 years	174	20.7*	11,817	9.9
12 years	228	27.1*	37,575	31.6
13 years or more	154	18.3*	65,661	55.1
Age (years):				
Less than 20	130	15.5*	7,488	6.3
20-24	125	14.9*	12,522	10.5
25-34	196	23.3	28,599	24.0
35-44	174	20.7*	32,354	27.2
45-54	122	14.5*	24,598	20.6
55 and over	93	11.1	13,569	11.4
Citizenship status:				
U.S. citizen	556	66.2*	110,423	92.7
Not U.S. citizen	284	33.8*	8,707	7.3
Census region:				
Northeast	57	6.8*	22,422	18.8
South	277	32.9*	28,970	24.3
Midwest	164	19.6*	41,636	35.0
West	342	40.7*	26,082	21.9
		Years		
Median age	33*		38	
		Dollars		
Median weekly earnings	\$280*		\$479	

\*Significantly different from all wage and salary workers at the 95-percent confidence level.

Source: Calculated by ERS using data from the Current Population Survey earnings microdata file.

Low-wage hired farmworkers tend to possess many of the same characteristics associated with low-wage employment in other occupations. More than half of the low-wage hired farmworkers were Hispanic, and over 64 percent completed less than 12 years of education, a much higher proportion than either the general labor force or the low-wage workforce as a whole. In addition, low-wage hired farmworkers were more likely to work in crop production (61 percent) and more likely to be U.S. citizens (56 percent).

Table 2

**Family income of hired farmworkers and all wage and salary workers, 1999<sup>1</sup>***Hired farmworkers have significantly lower family incomes than all wage and salary workers*

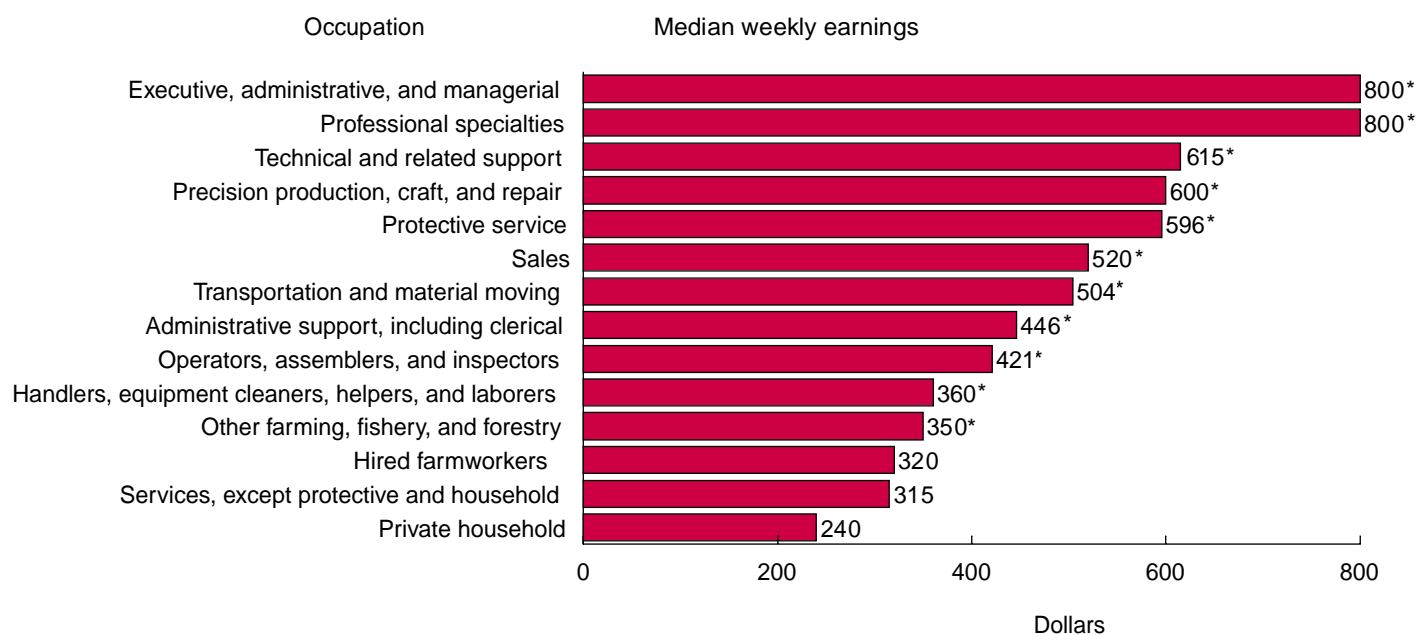
Income	Hired farmworkers		All wage and salary workers	
	Thousands	Percent	Thousands	Percent
Total	840	100	119,130	100
Less than \$10,000	198	23.5*	17,619	14.8
\$10,000-\$14,999	192	22.8*	10,508	8.8
\$15,000-\$29,999	146	17.4*	14,484	12.2
\$30,000-\$39,000	112	13.3	14,859	12.5
\$40,000-\$49,999	48	5.8*	12,500	10.5
\$50,000 and over	144	17.2*	49,160	41.2

\*Significantly different from all wage and salary workers at the 95-percent confidence level.

<sup>1</sup>Combined income of all family members during the last 12 months. Includes money from jobs; net income from businesses, farms, or rents; pensions, dividends, interest, social security payments; and any other money income received by family members who are 15 years of age and older.

Source: Calculated by ERS using data from the Current Population Survey earnings microdata file.

Figure 1

**Median weekly earnings of full-time workers, by occupation, 1999***Hired farmworkers rank near the bottom of major occupational groups*

\*Significantly different from hired farmworkers at the 95-percent confidence level.

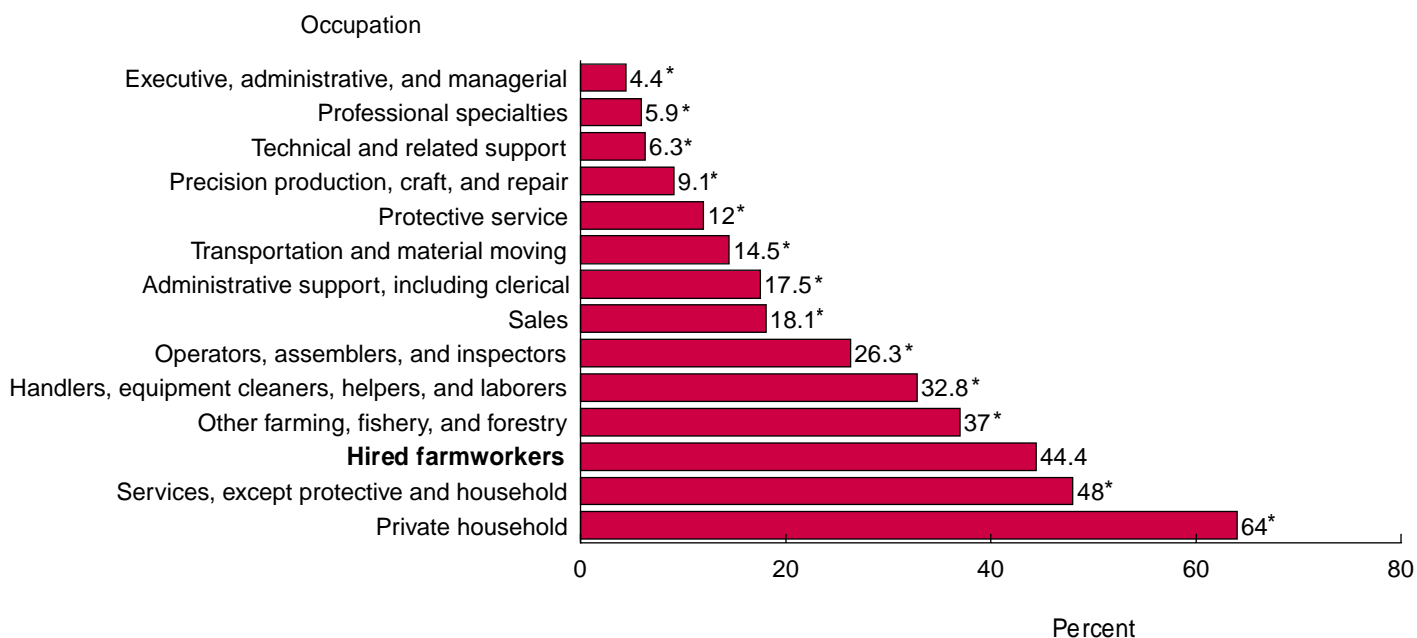
Source: Calculated by ERS using data from the 1999 Current Population Survey earnings microdata file.



Figure 2

### Full-time workers who are low-wage workers, by occupation, 1999

*Hired farmworkers rank near the top of low-wage earners*



\*Significantly different from hired farmworkers at the 95-percent confidence level.

Source: Calculated by ERS using data from the 1999 Current Population Survey earnings microdata file.

These characteristics showed little change when the analysis was limited to the 519,000 hired farmworkers 25 years of age and older working full time. About 231,000 of these workers (44 percent of those 25 years of age and older) earned low wages. More than half these workers were Hispanic (65 percent), nearly half (49 percent) had less than a 9th-grade education, over 60 percent worked in crop production, and over half (51 percent) were U.S. citizens. Also, over 60 percent of them had family incomes less than \$15,000 in the last 12 months. [Jack L. Runyan, 202-694-5438, [jrunyan@ers.usda.gov](mailto:jrunyan@ers.usda.gov)]

## Rural Nonfarm Earnings Increase in 1997, but Lag Urban Earnings Growth

*During 1997, real earnings per nonfarm job grew more slowly in rural than in urban areas. Earnings per job grew slightly faster in low-wage rural counties than in other rural counties, but low-wage counties still have jobs that average far lower earnings in every major industry group.*

**R**ural real earnings per nonfarm job rose by 1.3 percent during 1997, from \$22,473 in 1996 to \$22,985 in 1997. Urban real earnings per nonfarm job increased at a faster pace (2.1 percent), rising from \$30,955 in 1996 to \$32,825 in 1997. Since 1990, earnings per nonfarm job have fallen less or increased more in rural than in urban areas in only 2 years, 1993 and 1994 (fig. 1 and app. table 7). The rural-urban earnings gap persisted and widened during the 1990's. In 1989, rural earnings per nonfarm job were 73.8 percent of urban earnings. By 1997, that ratio had fallen to 70 percent.

### Rural Earnings Lag Urban in All Nonfarm Industries

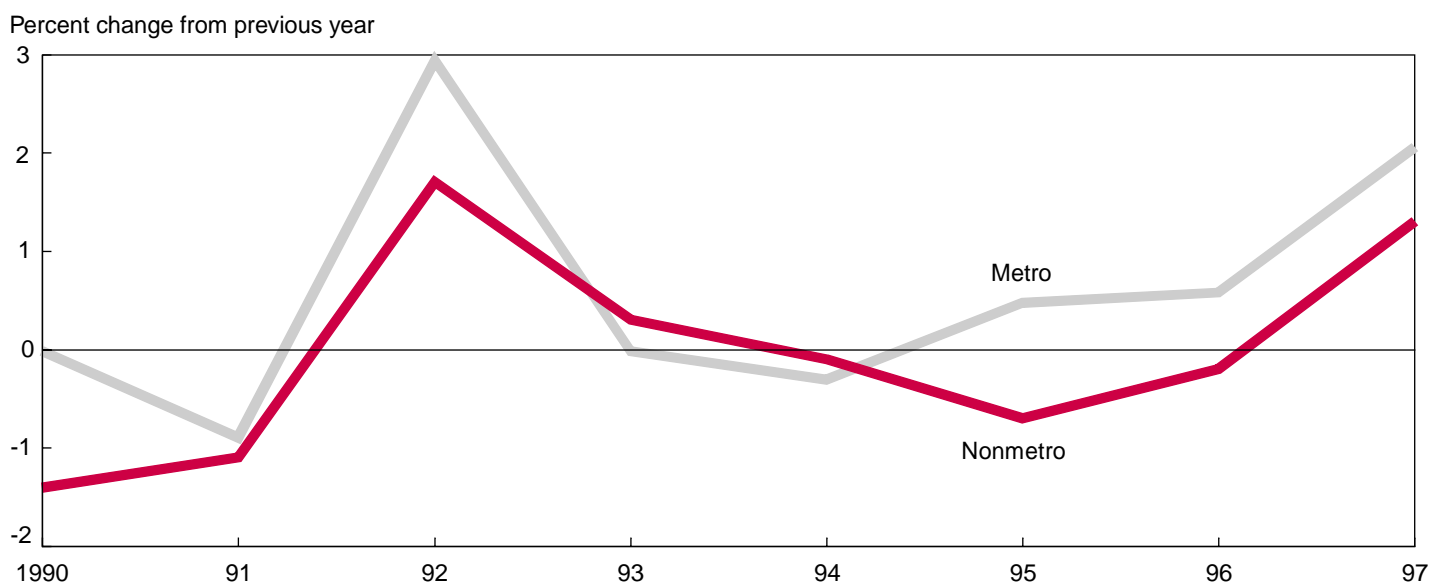
The rural-urban gap in earnings per nonfarm job exists in all industry sectors (table 1). During the 1990's, the gap widened sharply in four industry groups—agricultural services, forestry, and fishing; mining; transportation and public utilities; and finance, insurance, and real estate. The gap remained largest in the finance, insurance, and real estate industry. Rural earnings were only 54.3 percent of urban earnings in this industry in 1989 and fell to 45.8 percent of urban earnings by 1997. Rural jobs in this industry are more often part time and in lower paying administrative support and clerical occupations, while urban jobs in this industry are more often full time and in higher paying executive and technical occupations.

### Earnings Per Nonfarm Job Increased More in Low-Wage Than in Other Rural Counties

During 1997, real earnings per nonfarm job grew more in low-wage rural counties (1.5 percent) than in other nonmetro counties (1.2 percent). (For an explanation of what a low-

Figure 1  
**Annual change in real earnings per nonfarm job, 1989-97**

*Nonmetro earnings per job grew faster than inflation in 1997, only the third annual increase in real nonmetro earnings so far in the 1990's*



Note: Previous years' earnings converted to 1997 dollars using the chain-type personal consumption expenditures price index.

Source: Calculated by ERS using data from the Bureau of Economic Analysis.

## Earnings

Table 1

### Nonmetro real earnings per nonfarm job by industry, 1989 and 1997

*Nonmetro earnings trail metro earnings in all nonfarm industries, and most gaps widened during the 1990's*

Industry	1989		1997	
	Earnings per job	Ratio to metro earnings	Earnings per job	Ratio to metro earnings
	1997 Dollars	Percent	Dollars	Percent
Nonmetro nonfarm	23,059	73.8	22,985	70.0
Agricultural services, forestry, fishing, and other <sup>1</sup>	15,831	86.0	12,399	75.2
Mining	37,070	92.4	41,020	70.2
Construction	26,908	73.8	25,532	73.9
Manufacturing	30,767	70.3	32,204	67.6
Transportation and public utilities	36,030	82.6	33,305	73.1
Wholesale trade	27,272	66.2	28,877	64.9
Retail trade	14,505	81.2	13,758	79.5
Finance, insurance, and real estate	15,052	54.3	17,063	45.8
Services	18,452	64.1	18,954	63.2
Government	25,031	77.9	26,411	76.6

Note: Earnings and jobs in any industries other than government are suppressed in counties with few jobs in that industry or where a dominant employer accounts for a high share of the jobs in the industry. This suppression affects the calculation of earnings per job in both metro and nonmetro areas, causing the estimates shown here to vary somewhat from the true estimates that would be calculated if no county information were suppressed.

<sup>1</sup>Other is employees of foreign embassies working in the United States.

Source: Calculated by ERS using data from the Bureau of Economic Analysis.

wage county is, see the box on page 18). But this 1 year of slightly faster growth follows a decade of slower growth in low-wage counties. From 1989, the last year of growth before the 1990-91 recession, to 1991, earnings per job fell at an annual rate of 1.7 percent in low-wage counties, a faster rate of decline than in other rural counties (table 2). From 1991 to 1997, earnings per nonfarm job increased by 0.3 percent annually in low-wage counties, slightly slower than the 0.4 percent rate of increase in other nonmetro counties. The gap between real earnings per nonfarm job in low-wage and other rural counties grew from \$4,734 in 1989 to \$4,995 in 1997.

Earnings grew somewhat more in low-wage counties during 1997 because earnings in most industries, especially mining, manufacturing, and services, grew more in those counties than in other rural counties (table 3). The average earnings in every industry, however, are far lower than in other rural counties. The gap ranges from a high of over \$15,000 per mining job to a low of \$888 per agricultural services, forestry, and fishing job. Also, manufacturing jobs in low-wage counties average \$10,000 per job lower earnings than manufacturing jobs in other nonmetro counties, and low-wage county jobs are much less concentrated in manufacturing. While manufacturing accounts for about 17 percent of jobs in other rural counties, manufacturing accounts for 11 percent of jobs in low-wage counties.

The low-wage counties rely more on government and government-sponsored enterprises (the largest of which is the U.S. Postal Service) for jobs, but not because government jobs are concentrated in low-wage counties. In fact, there is one government job for every 12 residents in other rural counties while there is one government job for every 13 residents in low-wage counties. The greater dependence of low-wage counties on government jobs reflects lower numbers of jobs in other industries relative to the normal need for government services, such as law enforcement, public education, and mail delivery.

Table 2

**Real earnings per nonfarm job, by place of work, selected years**

*Earnings per job in low-wage nonmetro counties did not improve relative to earnings in other non-metro areas during the 1990's, and both types of nonmetro counties fell farther behind metro areas*

Place of work	1989	1991	1997
1997 dollars			
Nonmetro	23,059	22,473	22,985
Low-wage	18,654	18,022	18,345
Other	23,388	22,809	23,341
Metro	31,230	30,955	32,825
United States	29,875	29,529	31,144
Average annual change			
	1989-91	1991-97	1996-97
Percent			
Nonmetro	-1.3	0.4	1.3
Low-wage	1.7	.3	1.5
Other	-1.2	.4	1.2
Metro	-.4	1.0	2.1
United States	-.6	.9	2.0
Ratio of earnings to metro earnings			
	1989	1991	1997
Percent			
United States	-0.6	0.9	2.0
Nonmetro	73.8	72.6	70.0
Low-wage	59.7	58.2	55.9
Other	74.9	73.7	71.1

Source: Calculated by ERS using data from the Bureau of Economic Analysis.

**Low-Wage Counties' Economies Tend To Be Small and Remote**

According to ERS' typology of nonmetro counties, 48 percent of low-wage counties' economies depend on farming for a large share of earnings. According to ERS' urban influence codes, 52 percent of low-wage counties are completely rural (they lack a town of even 2,500 residents) and not adjacent to metro areas. With so many remote, small county economies, it is not surprising that their nonfarm earnings are lower than in other rural or urban counties. Looking at the number of establishments in each private industry group in the low-wage counties shows the small number of local employers. In all nine private industries, low-wage counties average fewer employers and fewer jobs per employer (table 4). The low-wage counties have much smaller populations on average than other nonmetro counties, and the numbers of establishments are in line with the size of county populations. Regardless, few small employers tend to create less competition for workers than many large employers, and less competition decreases pressure to raise wages.

**Most Low-Wage Counties Also Have Low Income**

Many people work outside their counties of residence, bringing home earnings to their counties. ERS' county typology indicates that 21 percent of the low-wage counties have 40 percent or more of their workers employed outside their counties of residence. Farm incomes and income from sources other than earnings, such as interest, dividends, rents,

## Earnings

Table 3

### Real earnings per nonfarm job in low-wage counties by major industry group, 1997

*Low-wage counties' earnings trail other nonmetro counties' earnings in all nonfarm industries*

Industry group	Low-wage counties		Other nonmetro counties	
	Earnings per job	Change, 1996-97	Earnings per job	Change, 1996-97
	Dollars	Percent	Dollars	Percent
Nonfarm	18,345	1.5	23,341	1.2
Agricultural services, forestry, fishing, and other <sup>1</sup>	11,628	2.2	12,516	.5
Mining	26,394	5.4	41,852	1.4
Construction	20,895	.7	25,912	.1
Manufacturing	22,646	3.9	32,670	2.6
Transportation and public utilities	28,740	-.8	33,654	-.6
Wholesale trade	24,283	2.2	29,219	2.8
Retail trade	12,508	1.3	13,860	1.4
Finance, insurance, and real estate	14,345	-.7	17,290	.1
Services	15,415	2.2	19,234	1.4
Government	23,077	.7	26,707	1.0

<sup>1</sup>Other is employees of foreign embassies working in the United States.

Source: Calculated by ERS using data from the Bureau of Economic Analysis.

Table 4

### Average establishments per county and wage and salary workers per establishment, by major industry group, 1996

*Compared with other nonmetro counties, low-wage counties average fewer business establishments and fewer workers per business in all nine major private industry groups*

Industry group	Low-wage nonmetro counties		Other nonmetro counties	
	Establishments per county	Wage and salary workers per establishment	Establishments per county	Wage and salary workers per establishment
	Number			
Agricultural services, forestry, and fishing	4.3	4.4	11.6	4.9
Mining	2.2	9.5	5.6	20.3
Construction	24.4	4.1	71.8	5.5
Manufacturing	13.8	29.1	41.7	50.6
Transportation and public utilities	15.6	6.3	37.2	10.3
Wholesale trade	15.2	7.5	40.7	9.4
Retail trade	65.4	8.1	172.5	10.6
Finance, insurance, and real estate	18.7	5.6	52.1	6.3
Services	70.4	8.6	208.0	10.7

Source: Calculated by ERS using data from the Bureau of the Census' 1996 County Business Patterns file as enhanced by Claritas, Inc., to estimate suppressed data items.

and government-transfer payments, also contribute to people's incomes, but are not considered in the low-wage county definition or in the analysis of nonfarm earnings per job. These sources of income could raise county economic status above that indicated by low-wage status.

Investigation of the Bureau of Economic Analysis' personal income data series, however, indicates that low-wage counties, and the commuting counties among them, tend to be low-income counties as well. When all U.S. counties are ranked by 1997 per capita

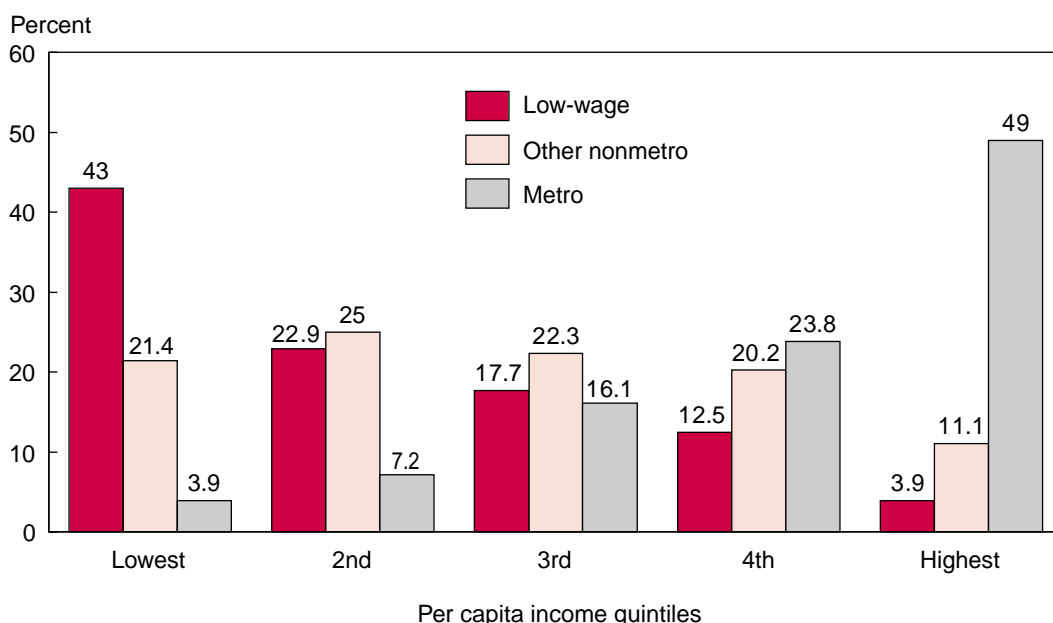
income and that distribution is divided into quintiles, 43 percent of the low-wage counties fall into the lowest income quintile (fig. 2), as do 50 percent of the low-wage counties with large numbers of commuters. Most remaining low-wage counties are in the next two higher income quintiles, with few making it into the top two income quintiles. Farm income as a share of total county income rises from 2 to 6 percent of low-wage county income as the income quintile rises. Dividends, interest, and rent are more strongly related to low-wage counties making it into higher income quintiles. That source of income rises from 14 percent of income in low-wage counties in the lowest income quintile to 29 percent of income in the low-wage counties in the highest income quintile.

Although the low-wage counties' earnings improved in the last year, these earnings numbers are subject to revision when the Bureau of Economic Analysis releases its 1998 estimates. It would be premature to characterize the 1996-97 improvement as the start of a trend. [Linda M. Ghelfi, 202-694-5437, lghelfi@ers.usda.gov]

Figure 2

**Distribution of counties across per capita income quintiles, 1997**

*Low-wage nonmetro counties are concentrated in the lowest fifth of per capita incomes nationwide*



Source: Calculated by ERS using data from the Bureau of Economic Analysis.

## Skills Training and Manufacturing Innovations Are Key to Raising Rural Workers' Wages

*Manufacturing innovations, such as new technologies and work organization practices, have generally been linked to higher wages in both rural and urban areas. These innovations have also been linked to increased training and higher skill levels and needs, particularly in the areas of interpersonal, problem-solving, and computer skills. Low-wage workers, who tend to be more concentrated in rural areas, are less likely to receive training than are higher wage workers. Thus, an emphasis on and encouragement of training and skills enhancement among more vulnerable low-wage workers is important and may enhance these workers' future earning capabilities.*

**R**ural manufacturing wages lag behind urban wages, according to data from the ERS Rural Manufacturing Survey (RMS) (see "Data Sources" appendix). Rural manufacturers reported paying their workers an average of \$8.90 an hour in 1995, \$1.60 (18 percent) less than in urban areas. In addition, rural firms were far more likely to be low-wage firms, where low-wage is defined as paying average wages of \$7.50 (the hourly rate equivalent of the 1995 poverty line) or less. About 36 percent of rural firms were low-wage employers, compared with 20 percent of urban firms. Furthermore, the more rural the location, the more likely a firm was to pay average wages at or below \$7.50.

A number of other characteristics identify low-wage firms. They tend to adopt fewer technologies and are less likely to introduce new work organization techniques (see box, "RMS Measures of Technology Use and Work Organization Practices"). Firms with fewer employees are more likely to pay lower wages as are those hiring larger shares of women and minority workers. Low-wage firms also tend to hire less educated workers. In addition, low-wage employers are lumped into particular industries. Well over 50 percent of firms in the apparel and leather industries are low-wage. In rural areas, 50 percent or more of all producers of food and kindred products, textiles, lumber, and electronics are also low-wage employers. Finally, low-wage firms are less likely to provide training for workers, suggesting that workers in low-wage plants, who are already likely to be less educated than other workers, are also less likely to obtain further training through their employer, thus perpetuating their low-wage, low-skill status.

According to the RMS survey, not only are wages in metro areas higher than in nonmetro areas, but they increased more in metro areas, between 1992 and 1995. In real terms nonmetro wages rose an average of \$0.42, compared with \$0.52 in metro areas, about a 20-percent greater increase. Thus, the gap between metro and nonmetro manufacturing wages may be growing.

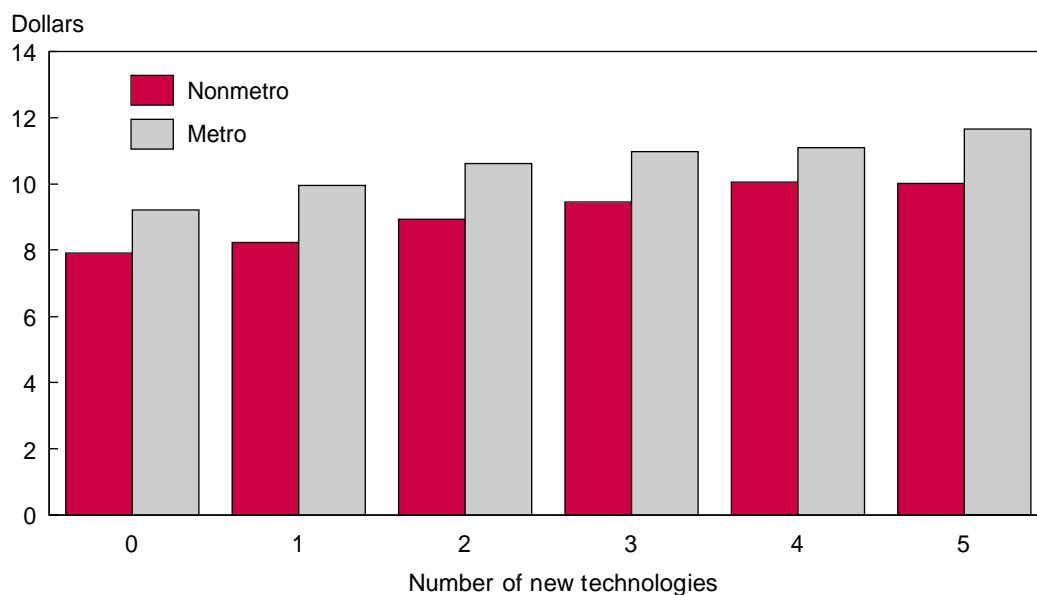
### Nonmetro Wages Rise With New Technology and Work Organization Use

The greater the number of new technologies a firm adopted, the higher the workers' average wages were, for both metro and nonmetro areas. The gap neither narrowed nor widened with the introduction of new technologies (fig. 1). Differences in technology adoption, then, cannot explain the metro/nonmetro wage gap, although they can shed some light on wage differences among workers in metro and nonmetro areas.

### RMS Measures of Technology Use and Work Organization Practices

In the Rural Manufacturing Survey, interviewees were asked to identify whether they had adopted one or more of five manufacturing technologies, including: Computer Aided Design (CAD), CAD/Computer Aided Manufacturing (CAD/CAM), Local Area Networks (LAN), numerical machines and/or programmable controllers. In addition, they were asked if they used the following work organization strategies: self-directed teams, quality circles (employee problem-solving), statistical control processing, total quality management (TQM), and/or job rotation. Interviewees were also asked about the average hourly wage for manufacturing workers in their plant at the time of the survey (1995) and in 1992. Finally, interviewees were asked how much they thought that various skills required of production workers, including reading, math, problem-solving, interpersonal, computer and other technical skills, had increased.

Figure 1

**Average hourly wages, by number of new technologies and residence, 1995***Workers earned more in plants that used more new technologies*

Source: Calculated by ERS using data from the Rural Manufacturing Survey.

The use of new technologies did not change the rural/urban gap, but the adoption of new organizational practices did narrow the gap a little. The positive relationship between wages and work organization techniques was ambiguous in metro areas, while among nonmetro firms a positive association between the number of work organization techniques a firm adopted and the wages they paid was more evident (fig. 2).

Urban wages grew more than rural wages, no matter how many new technologies were introduced, suggesting that something other than manufacturing innovations was driving the wage gains (fig. 3). Similarly, urban workers experienced greater wage gains no matter how many work organization techniques the firm had adopted (fig. 4). Although rural workers gained less than urban workers generally, the largest gains for rural workers were in firms using more new technologies and work organization practices.

**Nontraditional Skills May Prepare Workers for Better-Paying Jobs**

New technology and work organization adoption practices can explain differences in wages between workers, although they cannot shed much light on the rural/urban gap. Both rural and urban workers benefit from working in innovative firms. A firm's ability to adopt new manufacturing techniques though may be contingent on workers' skills. One of the reasons businesses reported for not adopting new technologies or management practices was inadequacy of worker skills. Earlier analysis also showed that nonmetro firms lagged behind metro firms in technology adoption, primarily because more low technology industries were located in rural areas (see F. Gale, *Agricultural Information Bulletin* 736-01, Aug. 1997). Firms using newer technologies may be reluctant to locate in rural areas and rural firms may not adopt new technologies, because of a perceived or actual lack of skills among rural workers.

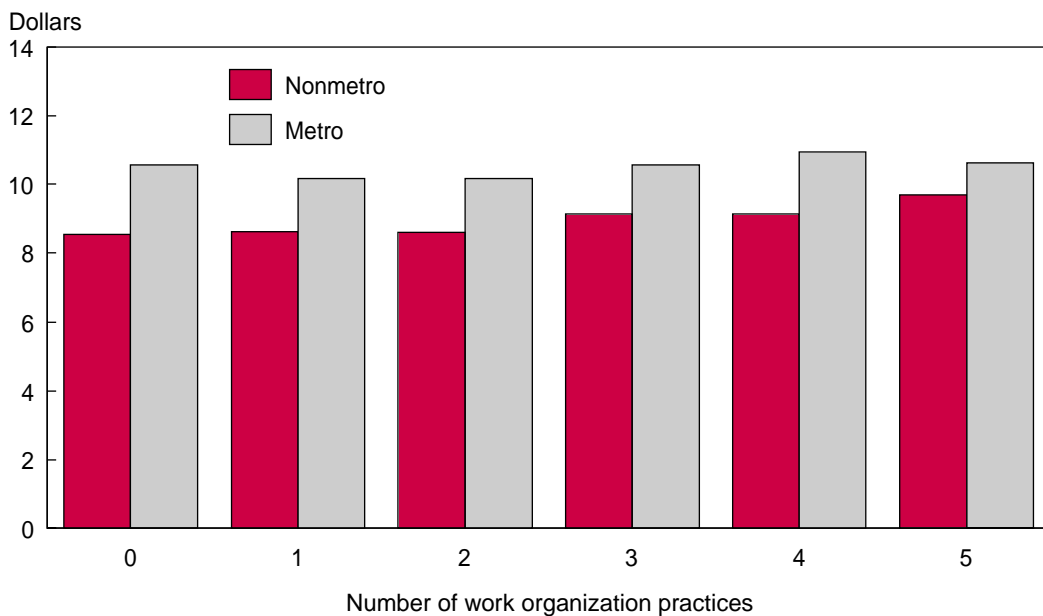
The RMS survey asked employers about changes in the production job requirements for six types of worker skills, including math, reading, computer, problem-solving, teamwork, and other technical skills. Firms reporting the use of new technologies and/or work organization techniques were more likely to report increases in their skill requirements in all



Figure 2

**Average hourly wages, by number of work organization practices and residence, 1995**

*Nonmetro workers earned more in plants that used more work organization practices*

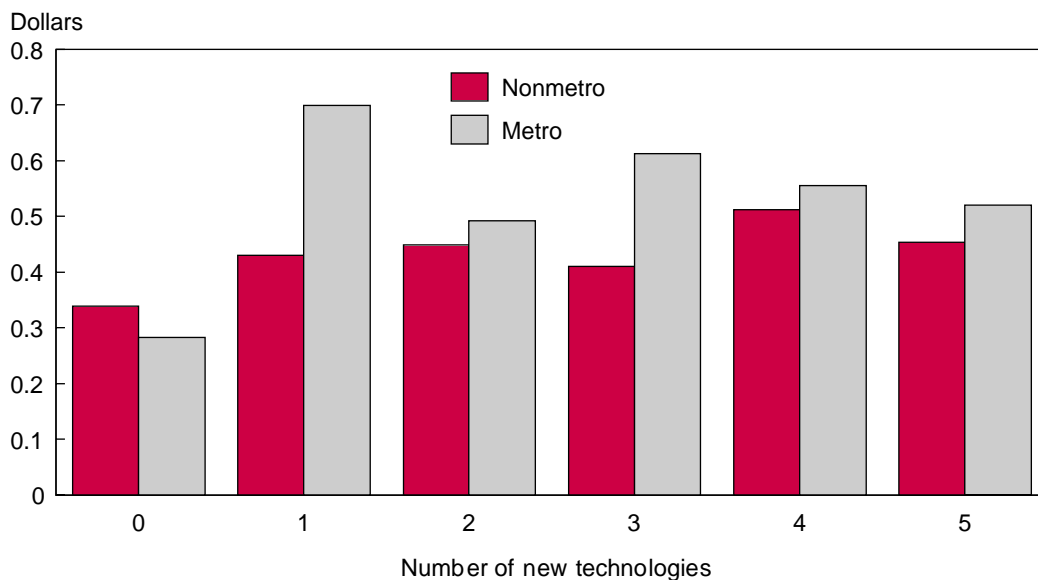


Source: Calculated by ERS using data from the Rural Manufacturing Survey.

Figure 3

**Change in real wages, by number of new technologies and residence, 1992-95**

*Real wage gains were lower for nonmetro workers, except in firms with no new technologies*



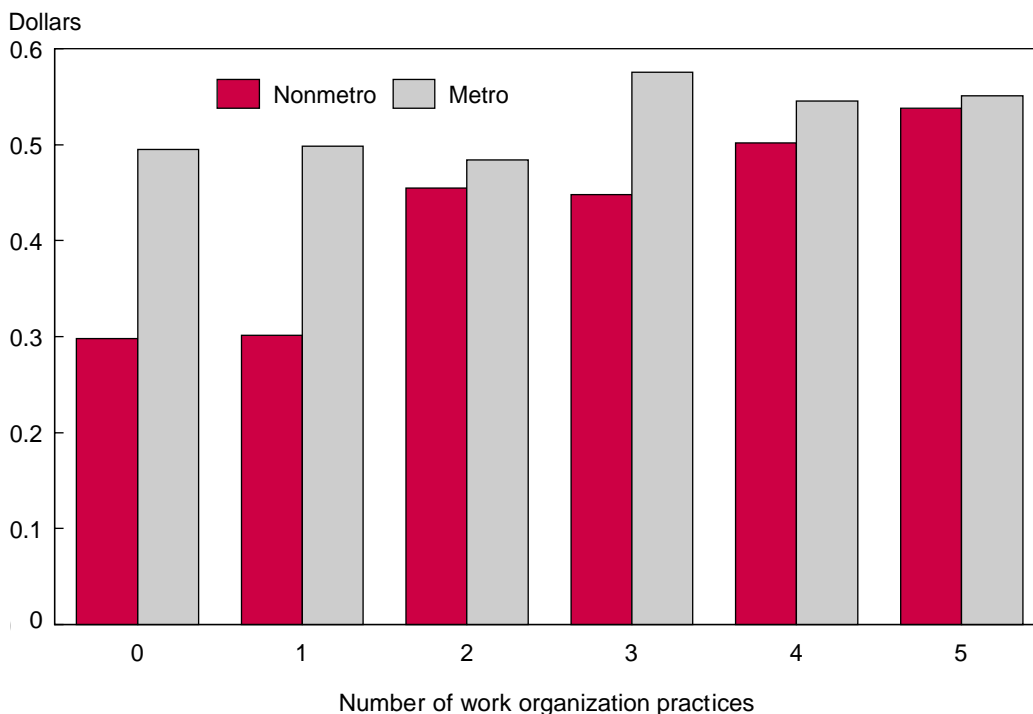
Note: 1995 wages were converted to 1992 dollars using the chain-type personal consumption expenditures price index.

Source: Calculated by ERS using data from the Rural Manufacturing Survey.

Figure 4

**Change in real wages, by number of work organization practices and residence, 1992-95**

*Real wage gains were lower for nonmetro workers, particularly in firms with fewer than two work organization practices*



Note: 1995 wages were converted to 1992 dollars using the chain-type personal consumption expenditures price index.

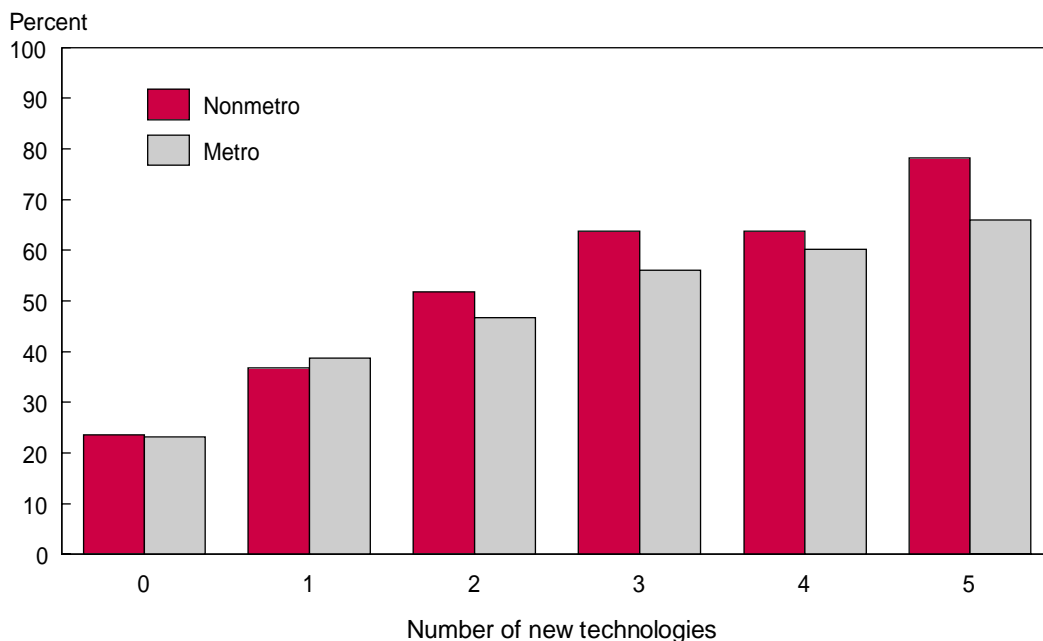
Source: Calculated by ERS using data from the Rural Manufacturing Survey.

six areas. In particular, nontraditional skills (skills other than reading and math) appear increasingly important in today's labor market. Employers, particularly those who have introduced new technologies and work organization practices, emphasized the importance of computer and problem-solving skills, as well as the ability to work in teams. These skills, which are not traditionally emphasized in formal education, may be key to preparing workers for higher wage jobs.

Firms often address the lack of skills among workers by implementing their own training programs. Employers who have adopted innovations such as new technologies and work organization practices are far more likely to report providing training for their workers. The more new technologies a firm used, the more likely employers are to provide training, in both metro and nonmetro locations. Among firms using two to five new technologies, rural training rates actually exceeded urban rates (fig. 5). Similarly, the more work organization techniques a firm introduced, the more likely employers were to provide training (fig. 6). While rural workers in firms that have introduced new technologies and work organization practices were likely to receive on-the-job training, workers in firms with fewer innovations generally received less training. As such, workers already at the bottom end of the wage scale—including rural, female, and minority workers—were less likely to obtain additional skills through their employers.

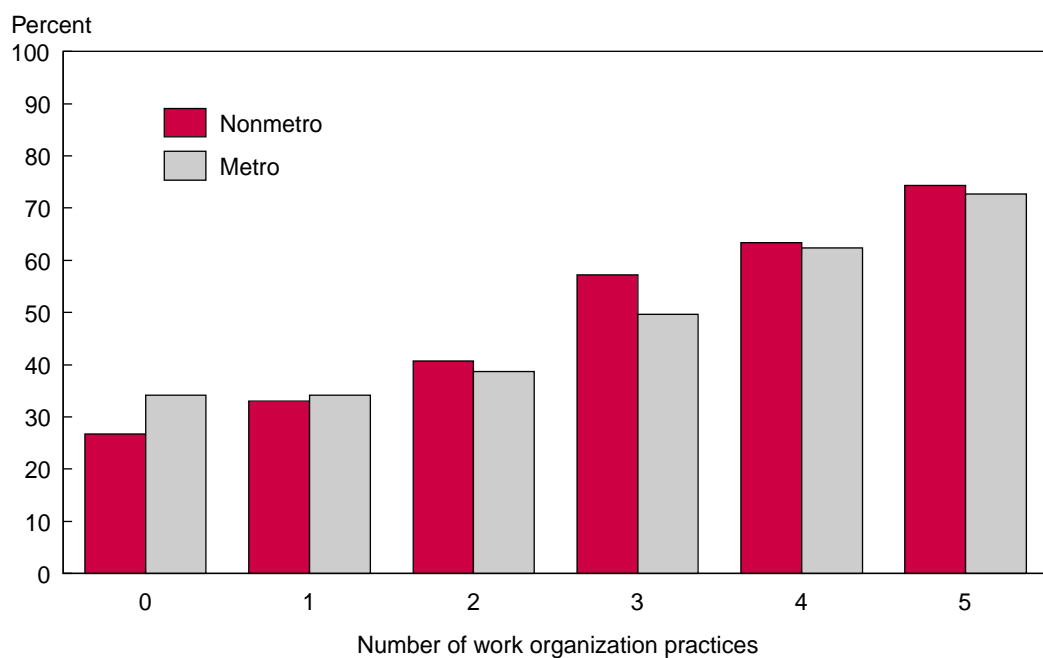
Worker training and skills enhancement are important both to ensure that industries have the workers they need and to increase workers' access to better paying jobs. While some firms may take the initiative to provide training and introduce innovative work practices, others may not. Firms may be hesitant to introduce innovations, precisely because of a

Figure 5  
**Firms providing training, by number of new technologies and residence, 1995**  
*Training increased with the introduction of new technologies*



Source: Calculated by ERS using data from the Rural Manufacturing Survey.

Figure 6  
**Firms providing training, by number of work organization practices and residence, 1995**  
*Training increased with the introduction of work organization practices*



Source: Calculated by ERS using data from the Rural Manufacturing Survey.

perceived or real scarcity of skilled workers. As such, an increased emphasis on policies that focus on skill enhancement may be warranted, although the focus should be on skills not traditionally associated with formal schooling. In addition to computer and technical skills, the ability to solve problems and work in teams were skills that manufacturing employers identified as increasingly important in the workplace, particularly among firms adopting new technologies and innovative work organization practices. Targeting groups likely to be left behind because they are employed in low-wage firms, in particular workers in rural areas, as well as women and minorities, may help ensure higher wages for these groups.

Skills can be improved by targeting individual workers and employers and by providing additional incentives for training programs. For instance, targeting industries with low wages and a lack of training is one possibility. Such programs may be important because low-wage employers are the least likely to initiate training programs. By targeting those employed in low-wage manufacturing firms, or the low-wage plants themselves, policies can both enhance workers' earning potential and the pool of workers available to firms. This, in turn, may stimulate new innovations in manufacturing that are linked to higher productivity and wages. *[Jennifer C. Olmsted, [jolmsted@oxy.edu](mailto:jolmsted@oxy.edu); or Peggy Cook, 202-694-5419, [pcook@ers.usda.gov](mailto:pcook@ers.usda.gov)]*

## Rural Poverty Rate Declines, While Family Income Grows

*The poverty rate for rural persons declined from 1997 to 1998, and rural median family income rose in 1998. The family income of persons in poor families declined considerably, while it grew or changed little for persons in the higher income groups. A sizable share of the rural poor families had at least one worker. Poor rural workers often worked part-time, tended to live in female-headed families, and seldom had more than a high school education. Rural working poor families relied more on benefits from assistance programs and less on family earnings income than working nonpoor families.*

In 1998, the rural poverty rate was 14.3 percent, down 1.5 percentage points from the 1997 level. The rural poverty rate exceeded the urban poverty rate by 2 percentage points (see box, "How Is Poverty Determined?"). In all, 7,480,000 rural persons lived in poverty. In addition to having a larger share of persons living below the poverty line, rural areas had a larger share of persons living close to the poverty line—11 percent of rural residents fell between 100-150 percent of the poverty line, compared with only 8 percent of urban residents. People in this income category risk falling into poverty should a family crisis or economic downturn occur. At the high end of the income distribution, only 16 percent of rural residents' incomes exceeded 500 percent of the poverty threshold, compared with 28 percent of urban dwellers (fig. 1; app. table 8).

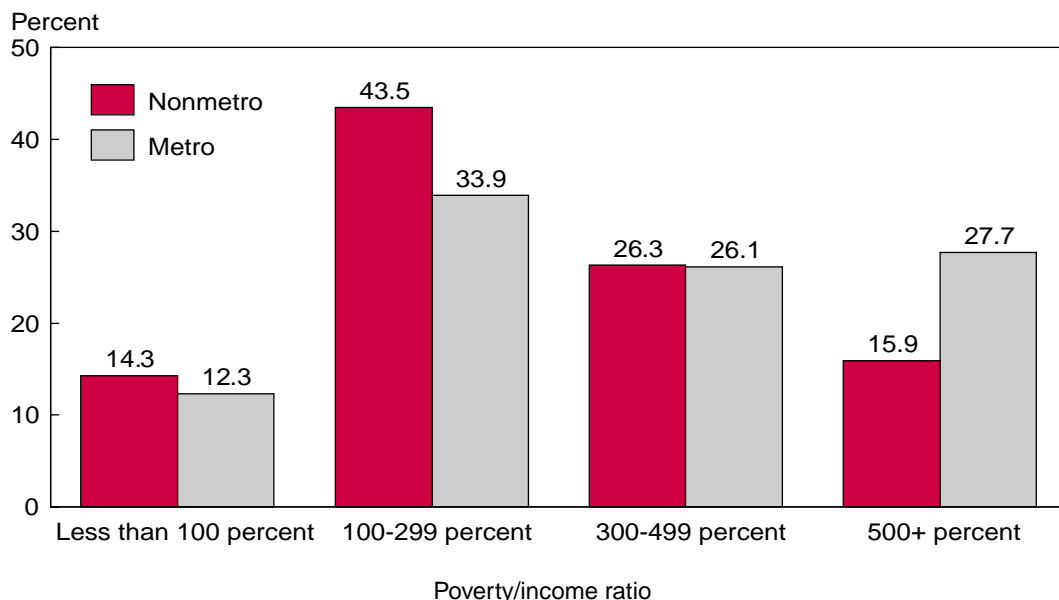
The rural and urban poor populations differ demographically. Compared with the urban poor, the rural poor are more likely to be non-Hispanic Whites and somewhat more likely to live in intact families. In addition, poverty was more prevalent in the rural than the urban South. Over half the rural poor live in the South, while the urban poor are more evenly distributed throughout the Nation.

The share of poor living in families with at least one full-time, full-year worker changed dramatically. In 1998, 29 percent of the rural poor lived in families with one or more full-time, full-year workers, a 9-percentage-point increase since 1996. The share of urban poor living in families with full-time, full-year workers also increased, climbing from 21 percent in 1996 to 25 percent in 1998, but it trailed the rural value by 4 percentage points. Welfare reform's emphasis on employment for cash assistance recipients may have contributed to increased family labor force effort among both rural and urban poor (app. table 9).

Figure 1

### Distribution of persons, by poverty/income ratio and residence, 1998

*More than half of rural residents lived in families with income less than 300 percent of the poverty level*



Source: Calculated by ERS using data from the March Supplement of the Current Population Survey, 1999.

### Poverty Rates Declined in 1998 . . .

During the 1990's, rural poverty rates remained consistently higher than urban poverty rates, but the rural/urban poverty gap narrowed slightly, dropping from 3.6 percentage points in 1990 to 2 percentage points in 1998. During the recession and early recovery years of the 1990's, the rural poverty rate rose steadily from 16.3 percent in 1990 to 17.2 percent in 1993. Along with the strengthening recovery, it dropped to 14.3 percent in 1998 (fig. 2; app. table 10).

### . . .While Rural Family Income Increased

Growth in rural family income accompanied the decline in the rural poverty rate. After adjustments for inflation, median family income in rural areas grew 4.9 percent between

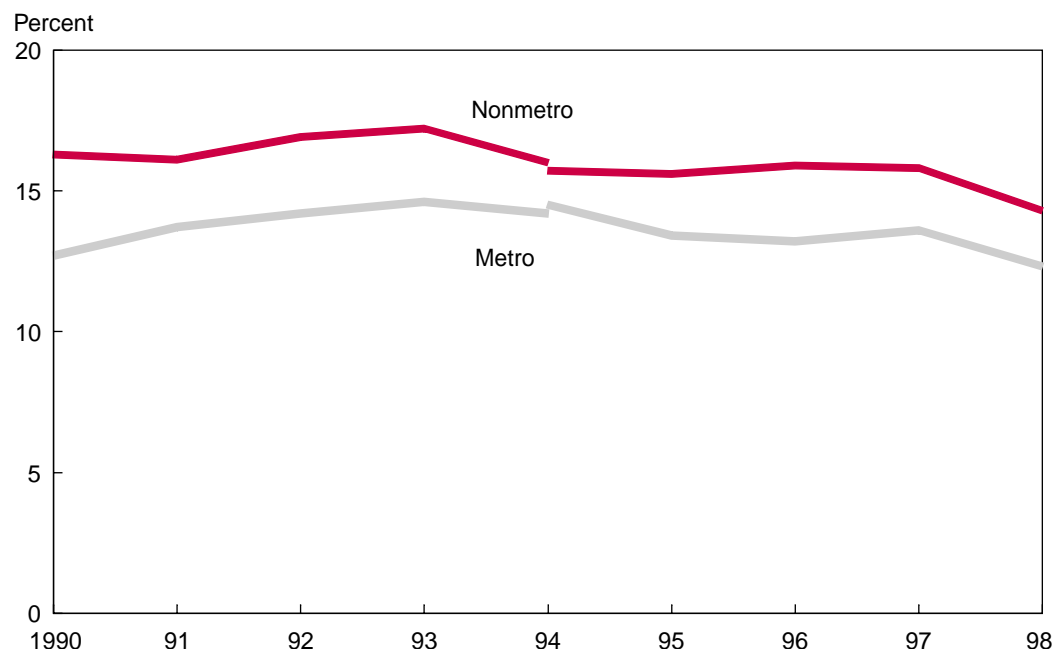
#### How Is Poverty Determined?

The poverty line is the minimum income level needed by a family or individual to meet basic needs such as food, shelter, clothing and other essential goods and services. The Office of Management and Budget (OMB) sets the official poverty lines, adjusted for family size and composition. In 1998, the poverty line for a family of four, including two children, was set at \$16,530. Cash income for each family or individual (including pretax income and cash welfare assistance, but excluding in-kind welfare assistance, such as food stamps and Medicare) is compared with the poverty line for families of similar composition. The poverty rate for an area or for a category of people is the percentage of persons living alone or in families with income less than the poverty line. The nonmetro population includes those persons whose metro/non-metro residency is not identified for purposes of confidentiality.

Figure 2

#### Poverty rates, by residence, 1990-98

*Since 1996, the nonmetro poverty rate has declined slightly but remains higher than the metro poverty rate*



Note: Change in the metro/nonmetro status of some counties caused a discontinuity in the 1994 data.

Source: Calculated by ERS using data from the March Supplement of the Current Population Survey, 1990-98.

1997 and 1998, outpacing urban growth of 2.3 percent. Rural family income growth, however, was not evenly distributed among all income categories. The median family income of families below the poverty line declined 4.6 percent between 1997 and 1998, while incomes grew for families with incomes between 100 and 299 percent of the poverty line and families with incomes between 300 and 499 percent of the poverty line. For those families with income over 500 percent of the poverty line, median income declined slightly. This finding may be due to slight upward shifts of family income resulting in a redistribution of families among the various income categories. For example, the share of families with incomes below the poverty line decreased 1.3 percentage points between 1997 and 1998, while the share of rural families with income over 500 percent of the poverty level increased by 2.2 percentage points. It is likely that families that entered the highest income category had somewhat lower incomes that depressed the median income and resulted in the slight income decline (fig. 3; fig. 4; app. table 10).

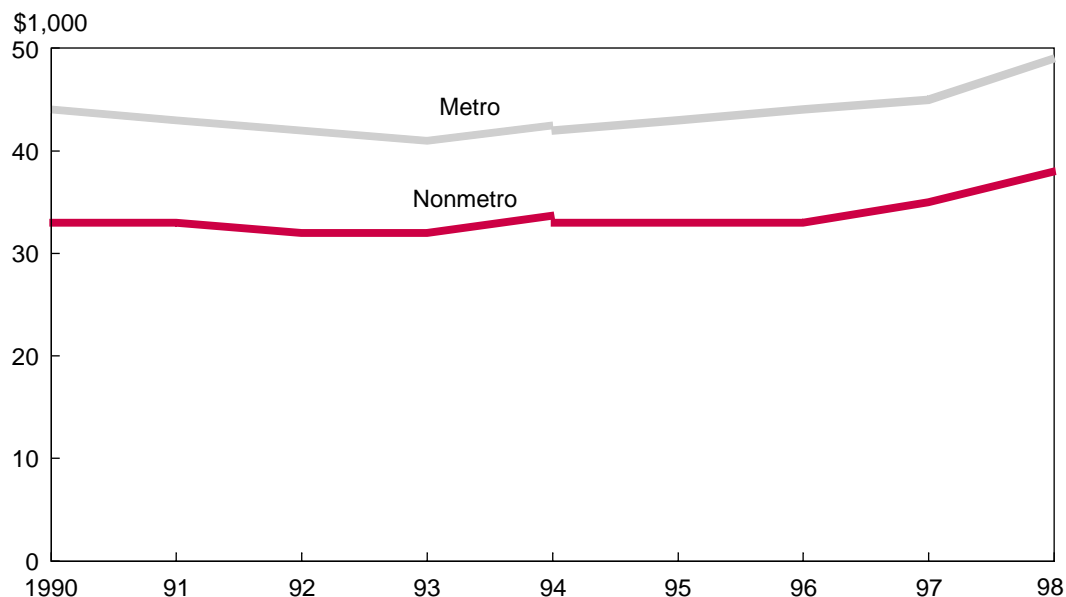
### Rural Family Poverty Follows a Familiar Pattern

The traditional patterns of rural poverty continued in 1998, with poverty rates varying substantially by race/ethnicity and other demographic characteristics (app. table 11). Even though their poverty rates declined, non-Hispanic Black, Hispanic, and non-Hispanic Native American families' chances of being poor were more than twice that of non-Hispanic White families. These minority groups also had much lower median family incomes than that of non-Hispanic White families. Non-Hispanic Asian families had the highest median family income (\$49,687) among racial/ethnic groups, even though 15 percent of Asian families were poor. The disparity between a high median family income and a poverty rate of 15 percent suggests a high level of income inequality among rural Asian families.

Figure 3

#### Median family income, by residence, 1990-98

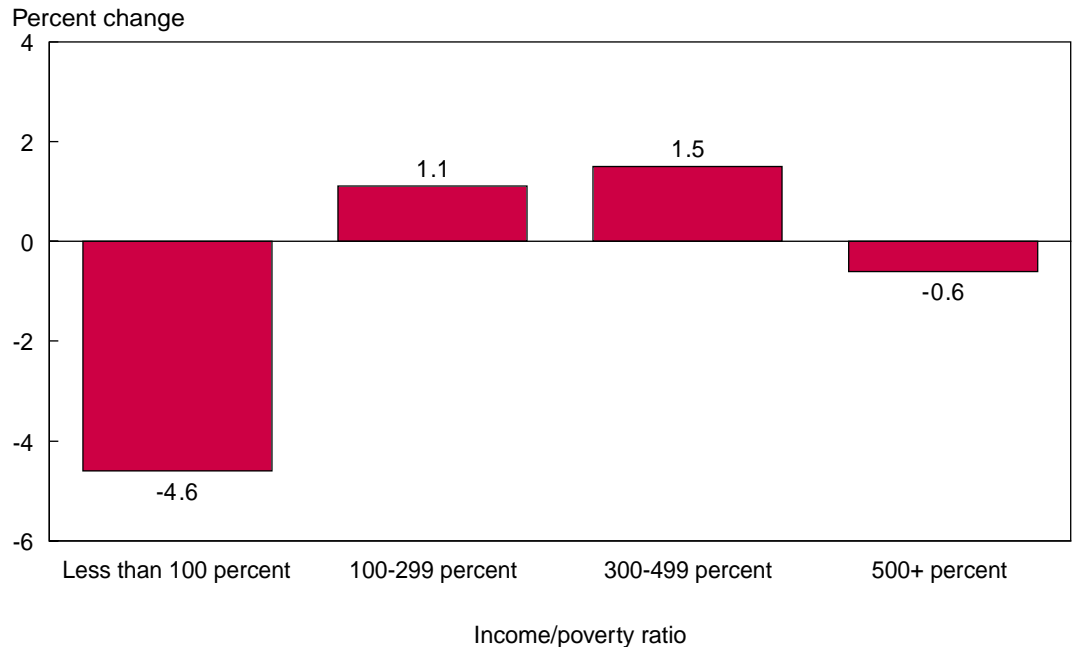
*Median family income in metro and nonmetro areas was largely stagnant in the early 1990's, but increased between 1996 and 1998*



Note: In 1998 dollars. Change in the metro/nonmetro status of some counties caused a discontinuity in the 1994 data.

Source: Calculated by ERS using data from the March Supplement of the Current Population Survey, 1990-99

Figure 4

**Changes in nonmetro median family income, by income group, 1997-98***The income of poor families dropped almost 5 percent in 1998*

Note: Family income in 1998 dollars.

Source: Calculated by ERS using data from the March Supplement of the Current Population Survey, 1998-99.

Heads of families who lacked a high school education had more than twice the likelihood of poverty and much lower median family income than family heads with a better education. Incomes grew modestly in families headed by a person who had at least a high school education, compared with families headed by a person who had not completed high school.

Family structure continues to strongly influence poverty status. Families headed by a single female had a high poverty rate and the lowest median family income of any group. Thirty-five percent of these families were poor, more than four times the share of married-couple families. Having working adults in the family also strongly influences family poverty rates and family income, with poverty rates declining and income rising as the number of workers per family increased. In general, larger families had higher poverty rates than smaller families. Two-children families were the exception, reflecting the tendency of better-off families to have two children (app. table 11).

### **Rural Working Poor Families Rely Less on Earnings, More on Income Assistance Than Working Nonpoor Families**

Most rural poor families contain one or more workers. More than two-thirds of rural poor families have at least one worker, while 16 percent have two or more workers (fig. 5). The structure of working poor families differs a great deal from working nonpoor families. Rural working poor families were much more likely than rural working nonpoor families to be headed by a single female (app. table 12; see "Who Is a Worker?"). Forty-six percent of working poor families were headed by a single female, compared with only 12 percent of working nonpoor families.

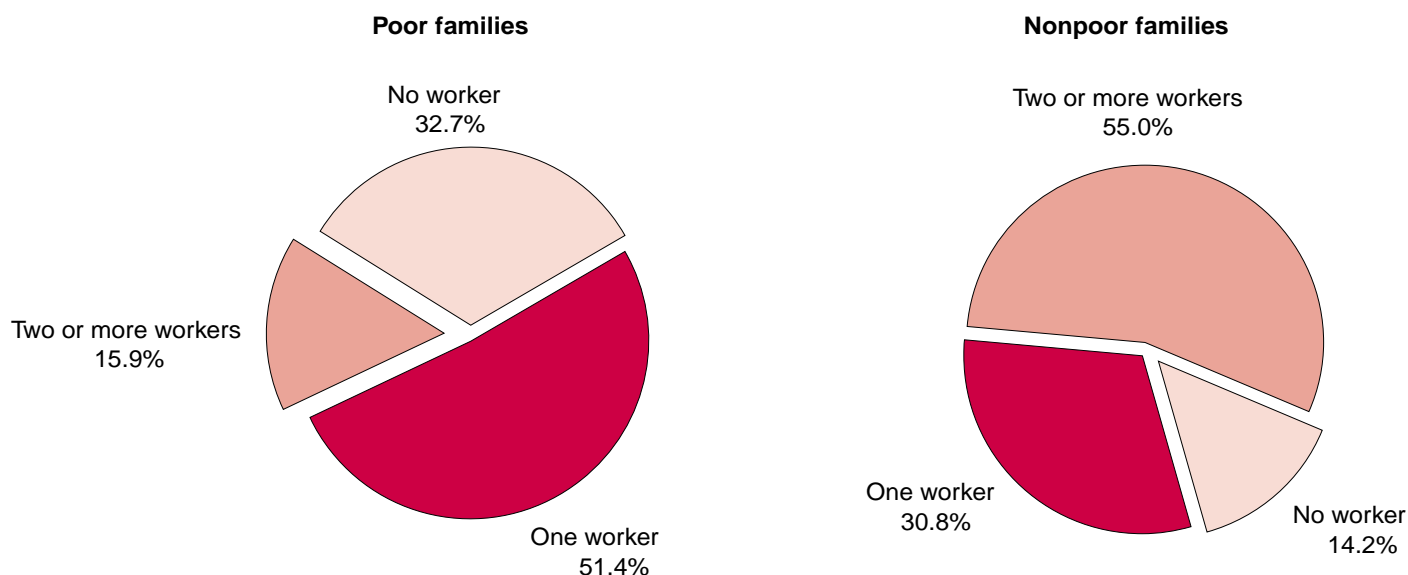
By definition, rural working poor families earned less than their nonpoor counterparts. These families had median family earnings of \$7,000, while working nonpoor families had median family earnings of \$40,000. Median earnings for working poor families headed by a single female (\$5,732) were even lower than for other working poor families. Working



Figure 5

### Number of workers per nonmetro family, by poverty status, 1998

*More than two-thirds of nonmetro poor families had at least one worker*



Source: Calculated by ERS using data from the March Supplement of the Current Population Survey, 1999.

### Who Is a Worker?

A worker is a person 21 years old or older who worked any time in 1998. Family heads of any age who worked at all in 1998 are also defined as workers. A poor worker is defined as above but with family income below the poverty level. A working poor family is defined as a family with one or more workers and whose family income fell below the poverty level.

poor families relied less on family earnings than working nonpoor families. For example, only 64 percent of working poor families received 80 percent or more of their family income from family earnings, while 76 percent of working nonpoor families received 80 percent or more of their family income from family earnings.

In addition to earnings income, many rural working poor families relied on benefits from assistance programs such as Temporary Assistance for Needy Families, Supplemental Security Income, and food stamps. This reliance is partially explained by the fact that working poor families are eligible for assistance to a greater extent than nonpoor families. About 39 percent of working poor families received some assistance benefits, compared with about 4 percent of working nonpoor families. Among working poor families, families headed by a single female had the highest median assistance income, at \$3,120, while other working poor families received median income assistance benefits of \$2,561 (app. table 12).

### Rural Working Poor Work Less, and Are Less Educated Than Nonpoor Workers

A tendency to work less than full-time, full-year contributes to the poverty of rural poor workers (app. table 13). Only 36 percent of poor workers worked full-time, full-year, compared with 71 percent of nonpoor workers. Poor workers living in female-headed families had particularly low levels of employment. Only 29 percent of these workers worked full-time, full-year, while 69 percent of their nonpoor counterparts worked full-time, full-year.

As expected, given that they work fewer hours, individual median annual earnings for the rural working poor (\$4,800) were much lower than for nonpoor workers (\$22,500). All rural workers relied heavily on wage and salary earnings, although the working poor were more likely than nonpoor workers to have earnings from self-employment.

In addition to working less than nonpoor workers, the rural working poor are less educated than nonpoor workers, which limits their opportunities to find higher-wage employment when they do work. Not only was the share of high school dropouts larger among the working poor (28 percent), but the share of workers in this group with a post-high school education was much smaller. In all, 28 percent of poor workers had education beyond high school, compared with 48 percent of nonpoor workers (app. table 13). *[Elizabeth M. Dagata, 202-694-5422, edagata@ers.usda.gov]*

## Food Stamp and Family Assistance Benefits Sharply Decline in the Post-Welfare-Reform Era

*Influenced by a robust economy, growth rates in overall per capita transfers slowed from about 5 percent per year in the early 1990's to 2-3 percent annually in metro and nonmetro areas between 1994 and 1997. The patterns of growth and decline differed across program categories and individual programs, especially the income maintenance category. Per capita transfers for family (cash) assistance and food stamp benefits sharply declined in both metro and nonmetro areas. Food stamp benefits declined more rapidly in metro than nonmetro areas, while benefits for family assistance declined more rapidly in nonmetro than metro areas. In 1997, government transfer programs accounted for 21 percent of nonmetro personal income, compared with 14.7 percent of metro personal income.*

In 1997, Federal, State, and local governments transferred \$1.1 trillion to individuals, organizations, businesses, and administrative and service costs for various social welfare programs. Of the \$1 trillion distributed in 1997 to individuals who received cash benefits through government programs, \$218 billion, or \$4,055 per capita, went to nonmetro residents. In comparison, metro residents received \$846 billion in government transfers, or \$3,950 per capita (app. table 14; app. table 15).

The proportional share of transfer payments for various programs was essentially the same in nonmetro and metro areas. About half of transfer dollars for individuals went to retirees and the disabled as payments for Social Security and government pensions. Approximately 35 percent was distributed for medical payments to suppliers of Medicare and Medicaid care. About 9 percent of transfer dollars was cash income benefits paid to qualifying families and persons through income maintenance programs, such as family assistance (see box, "TANF Replaces AFDC"), Supplemental Security Income (SSI), food stamps, and other income maintenance programs, including the Earned Income Tax Credit (EITC). Unemployment insurance, veterans' benefits, and employment, education, and training programs accounted for the remaining 6 percent (app. table 15).

### Nonmetro Areas Rely Heavily on Government Transfer Payments

Nonmetro areas rely more heavily on transfer payments than do metro areas. Per capita transfers accounted for 21.2 percent of rural personal income, compared with 14.7 percent of urban personal income in 1997. The levels of rural per capita transfer payments surpassed urban per capita payments all years between 1989 and 1997. In contrast, rural per capita personal income consistently lagged urban per capita income in all years, remaining about 70 percent of urban income (app. table 14; app. table 15).

### Annual Rates of Transfer Growth Continue To Slow

Annual rates of change in total per capita transfer payments generally follow changes in the economy, growing during recessions and falling during periods of economic recovery. Nonmetro and metro areas exhibited similar patterns of change during the 1990's. During 1989-97, nonmetro per capita transfer payments grew at an average annual rate of about 4 percent, about the same as for metro per capita transfer payments. During the recessionary years in the early part of the decade, per capita transfer payments grew at rates slightly above 5 percent in both areas. As economic recovery set in, the growth rates dropped to around 3.5 percent between 1992 and 1994 (app. table 15). Reflective of the strong national economy since 1994, annual growth rates in per capita transfer payments slowed consistently to well under 2 percent per year in nonmetro and metro areas (fig. 1; app. table 15).

### ... But Trends Vary Across Programs

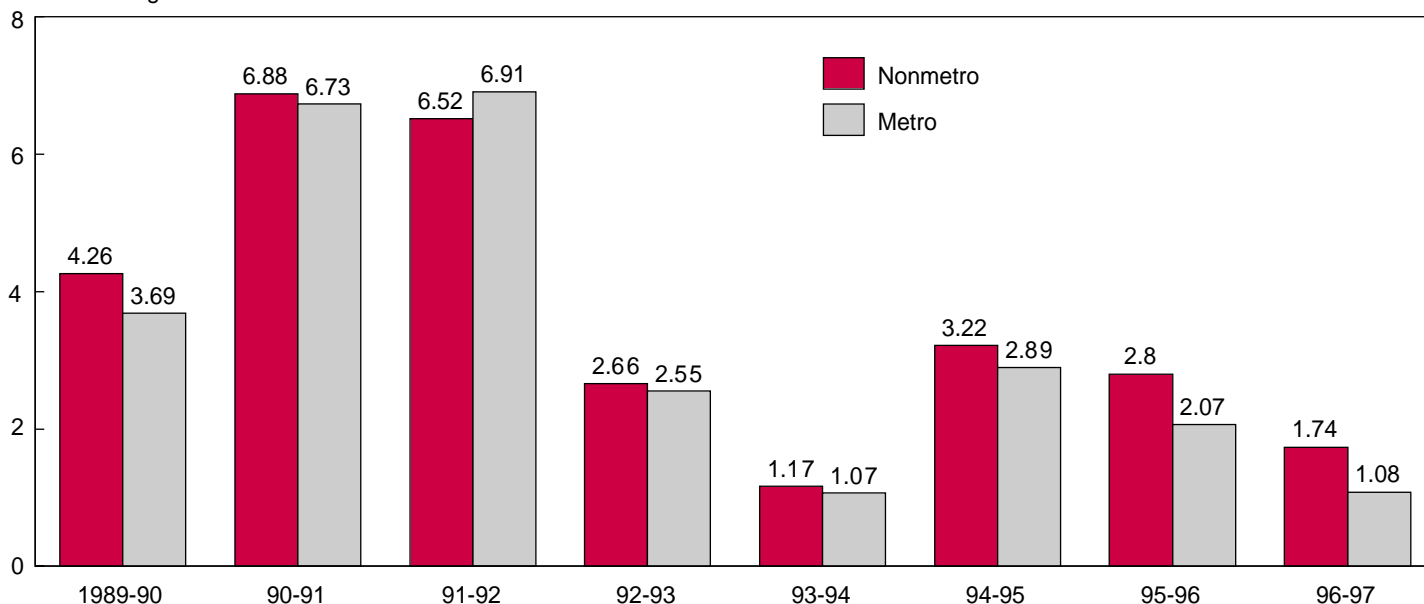
In comparison to the trends observed above for total transfers, the patterns of growth (or decline) vary considerably across the major program categories. Over the decade, nonmetro and metro per capita payments for retirement and disability benefits grew more slowly (around 2 percent per year), while benefits for medical programs increased more rapidly (around 6 or 7 percent per year) (app. table 15). For income maintenance programs, annual growth rates began to slow during the 1992-94 period and shrank to 0.4 percent in nonmetro areas and -1.6 percent in metro areas during 1994 and 1997 (app. table 15).

The patterns differ markedly among individual programs in the various program categories, especially Medicaid, and the main income maintenance programs, Supplemental

Figure 1

**Annual change in real per capita transfer payments, by residence, 1989-97***Growth in government transfer payments to individuals continued to slow in both nonmetro and metro areas*

Percent change



Source: Calculated by ERS using data from the Bureau of the Census.

**TANF Replaces AFDC**

Family assistance refers to cash (welfare) payments made to eligible low-income families with children under Aid to Families with Dependent Children (AFDC). AFDC was replaced by Temporary Assistance for Needy Families (TANF) with the passage of the Personal Responsibility and Work Opportunity Act (PRWORA) of 1996. PRWORA transferred Federal welfare dollars to States in the form of block grants along with the responsibility to tailor their own State welfare plans to local conditions and needs. Many States, especially those that had implemented alternative welfare systems under the State waiver system, set up their own uniquely named welfare programs. In this article, family assistance and TANF are used interchangeably to refer to cash welfare assistance.

Security Income (SSI), family assistance, and food stamps. Since 1994, benefits for the Medicaid program, which grew rapidly during 1989-91 at average annual rates of 18 percent and 22 percent in metro and nonmetro areas, steadily slowed. SSI benefits grew at relatively slow rates in the first 2 years of the period, but during 1996-97, declined 1.4 percent in nonmetro and 1.8 percent in metro areas (fig. 2).

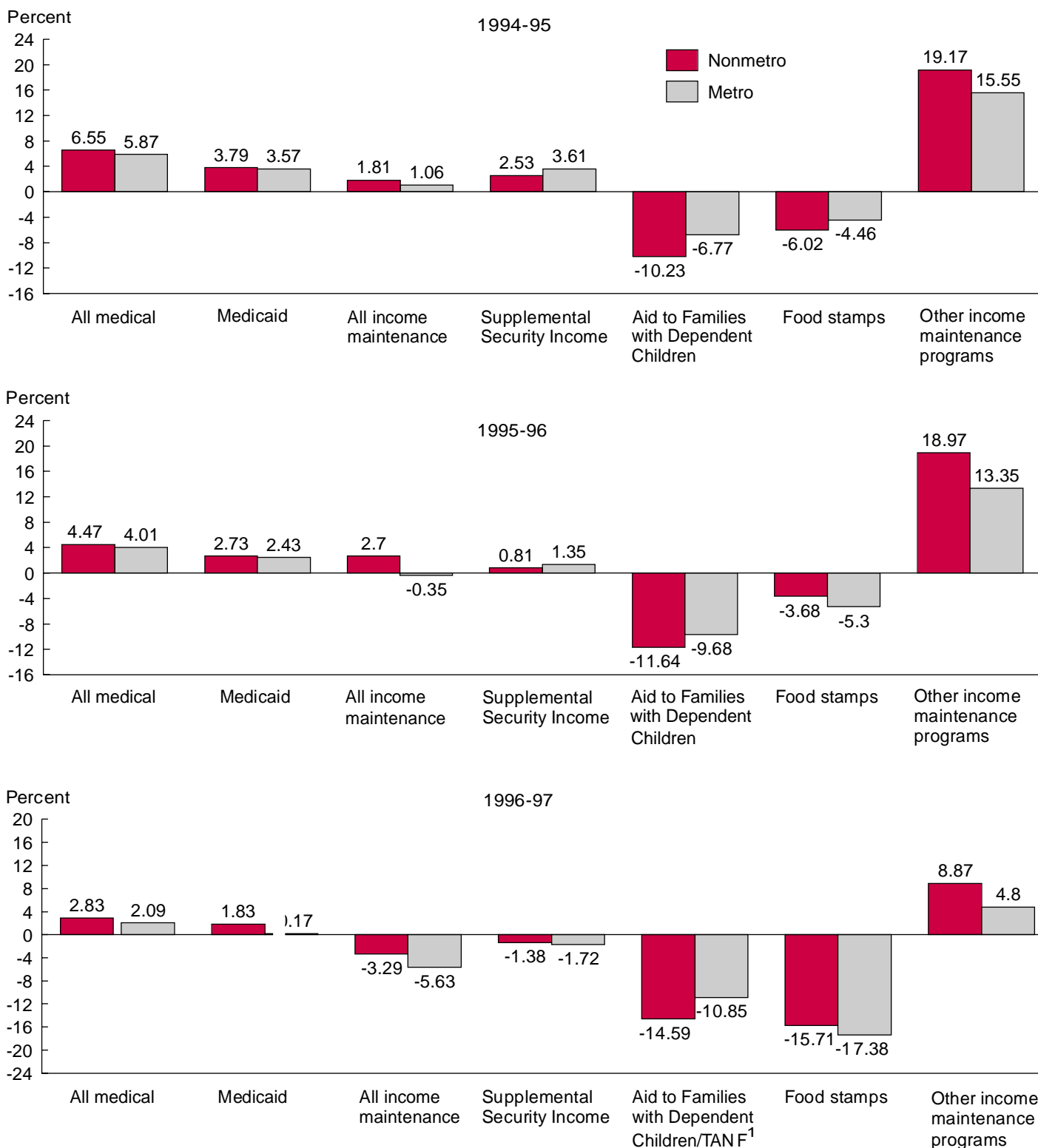
Changes were most striking in the food stamp and family assistance programs. Continuing the 1995-96 trends, nonmetro per capita benefits for family assistance declined in 1996-97 by around 15 percent, while per capita food stamp benefits declined by more than 15 percent. Family assistance benefits, however, declined more sharply in nonmetro than metro areas, while food stamp benefits declined more sharply in metro than nonmetro areas (fig. 2).

Unlike the per capita trends for SSI, family assistance, and food stamps, "other income maintenance programs"—Earned Income Tax Credit, general assistance, emergency assistance and others—grew more rapidly than any of the other programs, although the

Figure 2

**Average annual change in transfer payments for selected programs, by residence, 1994-95, 1995-96, and 1996-97**

*TANF and food stamp benefits declined sharply during 1996-97 in both metro and nonmetro areas*



<sup>1</sup>PRWORA's provisions replaced Aid to Families with Dependent Children (AFDC) with Temporary Assistance for Needy families (TANF) in August 1996.  
Source: Calculated by ERS using data from the Bureau of Economic Analysis.

growth slowed considerably in 1996-97 from the previous years (fig. 2). Not surprisingly, these results correspond with dramatic declines in the size of the TANF and food stamp caseloads. In the years immediately before and following the passage of PRWORA, the number of families on welfare have dramatically declined, and participation in the Food Stamp program declined by about one-third, mostly after 1996.

While the reasons for these current trends are not fully understood, they have been attributed to a strong economy and the effects of welfare reform legislation on the operation of programs by States and local areas. Favorable economic conditions opened up new jobs in local labor markets and reduced unemployment and poverty rates, thereby diminishing the need for public cash assistance.

Passage of PRWORA in August 1996 not only altered the scope and structure of the system of cash assistance for needy families, but also enacted changes in other programs, including food stamps, SSI, and Medicaid. Even before the legislation became law, many States had begun to reform their welfare systems under Federal waivers. PRWORA tightened the eligibility requirements for the programs, limited eligibility of most legal immigrants and able-bodied unemployed adults without children for family assistance and food stamps, and instituted time limits and work requirements for family assistance. In response to PRWORA, many States also created programs to divert families seeking assistance to other forms of temporary help. Furthermore, by allowing States to plan and operate their own State welfare plans, PRWORA shifted the national emphasis on assistance from welfare to work.

The relative importance of the economy versus welfare reform in explaining the declines remains a matter of debate among researchers. Recent ERS research using State data indicates that declines in unemployment rates accounted for more than a third of State differences in food stamp participation, while waivers and political factors, such as a governor's political party, explained an additional 10 percent of the differences. In this study as well as other similar studies, a large proportion of the differences remained unexplained.

The faster declines in family assistance benefits in nonmetro than metro areas are consistent with published statistics showing that States with disproportionately large rural and/or minority populations traditionally have paid low welfare benefits, which may affect the amount of TANF Federal block grants available to predominantly rural States to run their own State programs (see *Rural Conditions and Trends*, Vol. 8, No. 1, 1997, pp. 38-47). The faster declines in food stamp benefits in metro than nonmetro areas partly reflect the concentration of disproportionate numbers of immigrants in metro areas who became ineligible for TANF under PRWORA.

### **Counties With Large TANF and Food Stamp Declines Concentrated in Certain States**

Counties with TANF and food stamp declines greater than the national average (20 percent) during 1996-97 tend to be concentrated within the boundaries of certain States. In the case of TANF, nearly all counties in 3 States (Tennessee, Wisconsin, and Wyoming) and a sizable number of counties in about 20 States had higher than average rates of decline in benefits. In the case of food stamps, most counties in 5 States (Wisconsin, Ohio, Florida, Nevada and Kansas) as well as a substantial share of the counties in about 11 other States had high rates of declining benefits. Both family assistance and food stamp benefits declined rapidly in nearly all counties in Wisconsin, one of the earliest States to implement a waiver program (fig. 3 and fig. 4).

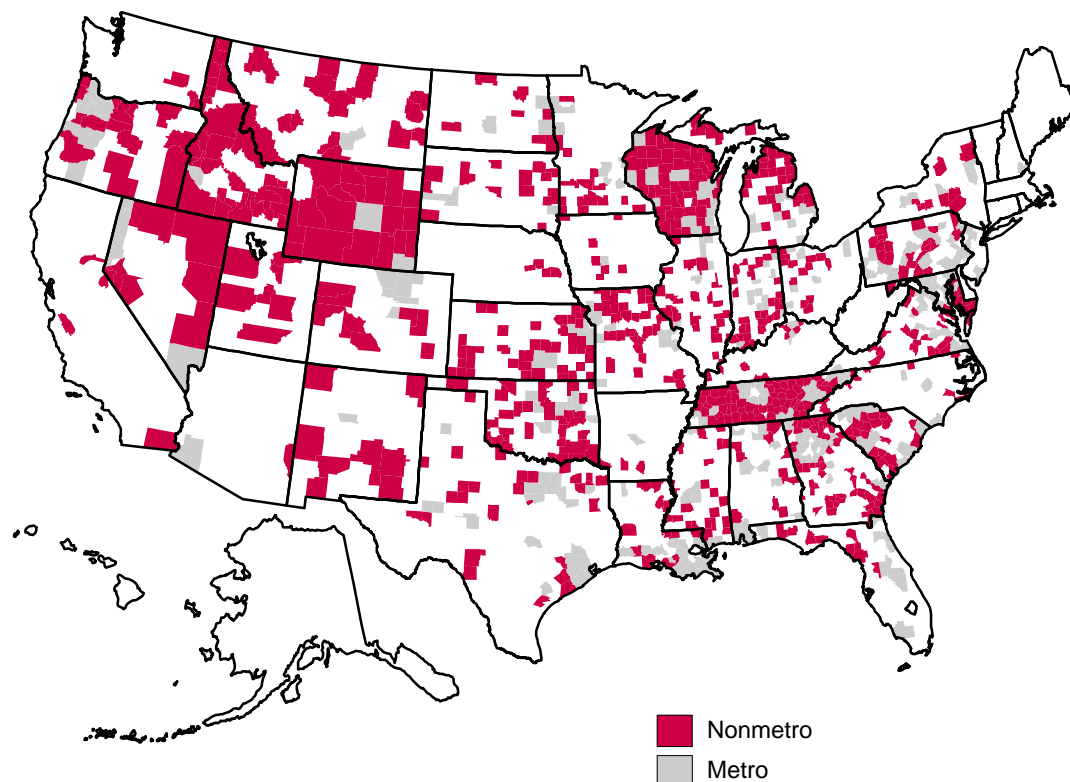
### **Economic Reliance on Transfers Varies by Nonmetro County Type**

Per capita transfers and the reliance on transfer payment income varied among county types. Counties in the Midwest, West, and those that are more highly urbanized had somewhat lower levels of per capita transfers and economic reliance on income from transfers than all nonmetro counties. In comparison, per capita transfer payments were

Figure 3

**Counties with rapid decline in per capita family assistance benefits, by residence, 1996-97**

*Declines in family assistance benefits were greater than the decline in the national average in about one-third of counties*



Note: Rapid decline is defined as greater than the national average decline of 20 percent.

Source: Calculated by ERS using data from the Bureau of Economic Analysis.

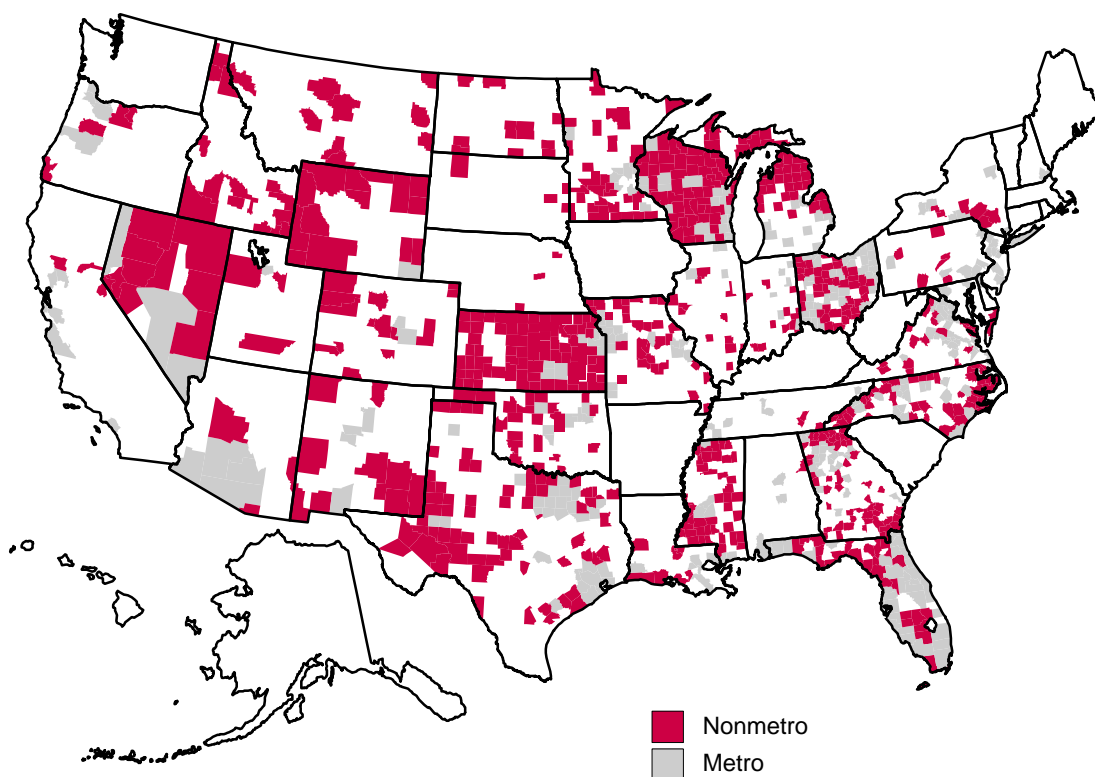
higher in the South, with its higher concentrations of poor populations, including minorities (app. table 16).

Nonmetro counties with concentrations of elderly, poor, and low-income populations tend to have higher per capita transfer payments and greater economic reliance on transfer income. For example, retirement-destination counties had the highest per capita payments (\$4,525), which came disproportionately from programs benefiting people age 65 years or older, such as Social Security, government pensions, and Medicare (app. table 16).

Similarly, persistent-poverty and low-wage counties (see p. 18 for definition) depended more heavily on transfer payments. With poverty rates exceeding 20 percent for several decades, persistent-poverty counties derived over 27 percent of total personal income from transfer payments, with disproportionate shares coming from medical payments (primarily Medicaid) and income maintenance benefits for programs traditionally serving poor groups. In low-wage counties, transfer payments accounted for over 25 percent of total personal income. Compared with all nonmetro counties, these counties had slightly higher shares of transfers represented by income maintenance programs and slightly lower shares coming from retirement/disability payments (app. table 16).

Compared with low-wage counties, persistent-poverty counties had higher per capita benefits for all of the programs traditionally aimed at poor groups: Medicaid, family assistance, food stamps, SSI, and other income maintenance programs. With higher concen-

Figure 4

**Counties with rapid decline in per capita food stamp benefits, by residence, 1996-97***Counties with rapid declines in food stamp benefits were concentrated in about a third of the States*

Note: Rapid decline is defined as greater than the national average decline of 20 percent.

Source: Calculated by ERS using data from the Bureau of Economic Analysis.

trations of the elderly population, the low-wage counties had higher per capita benefits for Social Security and Medicare than those received by the persistent-poverty counties. This finding suggests that working low-wage families in these counties may not qualify, may be unaware of their eligibility, or may choose not to seek assistance from Medicaid and the income maintenance programs (fig. 5; app. table 17).

It is difficult to predict whether or not current trends of reliance on government transfer payments will continue should the National economy enter another recessionary period. For a number of years, transfer payments have consistently accounted for around 21 percent of rural total personal income. The mix of transfer payments from different programs, however, has shifted toward slightly higher shares of transfers from retirement/disability programs, including Social Security, and slightly lower shares from various income maintenance programs. The outcomes of new changes in welfare laws resulting from re-authorization legislation for PRWORA may change the balance even more. [Peggy J. Cook, 202-694-5419, [pcook@ers.usda.gov](mailto:pcook@ers.usda.gov)]

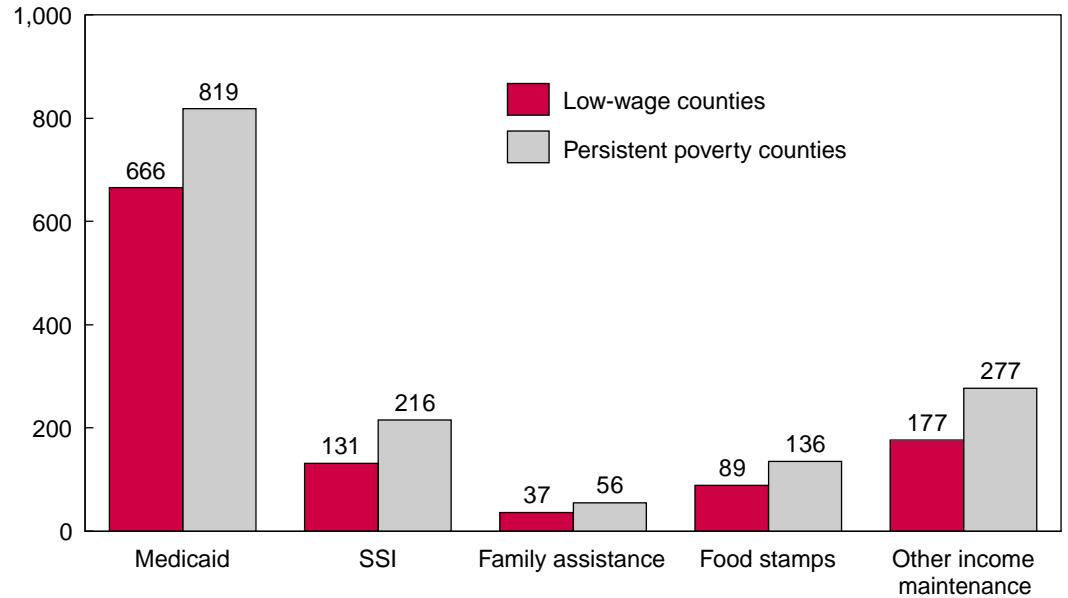


Figure 5

**Per capita transfer payments for selected programs in nonmetro low-wage and persistent-poverty counties, 1997**

*Per capita benefits for low-income programs were higher in persistent-poverty than low-wage counties*

1997 Dollars



Source: Calculated by ERS using data from the Bureau of Economic Analysis.

## Unique Housing Challenges Face Rural America and Its Low-Income Workers

*Compared with typical urban housing, housing in rural America is inferior in physical quality and size. While rural households spend a smaller share of their income on housing, they less often live in crowded conditions, and are more satisfied with their home and neighborhood. Low-income rural households that depend on employment earnings for most of their income are more likely to have housing difficulties.*

**A**ccess to adequate and appropriate housing is a basic need for all U.S. residents. These housing needs and our abilities to satisfy them vary across the Nation. Rural communities, particularly those sparsely populated and in remote locations, are widely thought to be disadvantaged in their housing and housing finance markets. Similarly, in urban areas, the housing situation of central-city residents is typically inferior to that of suburbanites.

A basic tenet of U.S. housing programs, which has received more emphasis in recent years, is that promoting homeownership is an appropriate role for government. Quarterly Census Bureau surveys show that the homeownership share, which has been increasing in both rural and urban areas, reached a historic high of 67.7 percent in September 2000. This is up roughly 2 percentage points since 1997, when the American Housing Survey that is the basis for much of this report's material was conducted. Recent Federal initiatives to promote both rural and urban homeownership include home mortgage targets for Fannie Mae and Freddie Mac, increased flexibility given to housing authorities to support home purchase as an alternative to rental assistance, and greater Federal agency support for activities of nonprofit organizations, and State and local governments. While homeownership may be a positive step for many who do not own a home, access to affordable housing of acceptable quality is a more basic need for those whose current homes fail to meet minimum standards.

We used data from the 1997 American Housing Survey to investigate differences between nonmetro and metro housing. The definition of metro and nonmetro areas has been modified to reflect the reality of effective housing markets (see box, "Definitions"). While this rural/urban delineation is meaningful for investigating housing differences, keep in mind the great diversity of communities within these aggregations. We specifically focus on low-income households, the population most likely to have housing difficulties. We give special attention to those low-income households that largely depend on wage and salary income because, for most, increased earnings will make possible a better housing situation.

### Rural and Urban Homes and Neighborhoods Often Differ

In 1997, 22 percent of the Nation's nearly 100 million households lived outside metro housing markets. While in some ways the housing situation of these rural households is

### Definitions

**Metro/nonmetro:** For all material based on the 1997 American Housing Survey, we necessarily use the associated metro definition, which is from the official list of metro areas published June 27, 1983, by the Office of Management and Budget. All other material uses more recent OMB designations of metro areas.

**Low-income:** Household income of \$24,600 or less, which was 150 percent of the poverty threshold for a four-person family in 1997. This income threshold is roughly equivalent to that for participants in numerous government housing subsidy programs, including USDA's Single-Family Housing Program.

**Wage-dependent:** Wage or salary earnings account for at least half of annual household income.

much like that of urban households, in other ways it is quite different (see box, “Indicators of Housing Quality”).

Typical rural homes are smaller and less costly than urban homes. Rural households had median monthly housing costs of \$362 and a median of 1,500 square feet of living space (app. table 18). Corresponding urban medians were higher, \$599 and 1,750 square feet. Rural households were three times more likely than urban households to live in a mobile home, a less expensive housing alternative (fig. 1).

Urban homes often were more crowded, with nearly 8 percent deficient by this measure, compared with 6 percent for nonmetro homes. Rural homes were more likely to have

### Indicators of Housing Quality

*Physical quality:* This index is widely used by the Bureau of the Census to identify housing units with significant physical problems. Severely inadequate homes were those with a severe physical problem in at least one of five categories: plumbing, heating, electric, upkeep, and hallways. Moderately inadequate homes had no severe problems, but had at least one moderate problem (such as no kitchen sink) in one of five categories: plumbing, heating, kitchen, upkeep, and hallways.

*Expensive:* Situations of high cost burden, where monthly housing costs were more than 30 percent of a household’s monthly income. Housing costs include all expenditures for mortgage payments (including contract or installment loans), rent, utilities, insurance, and taxes.

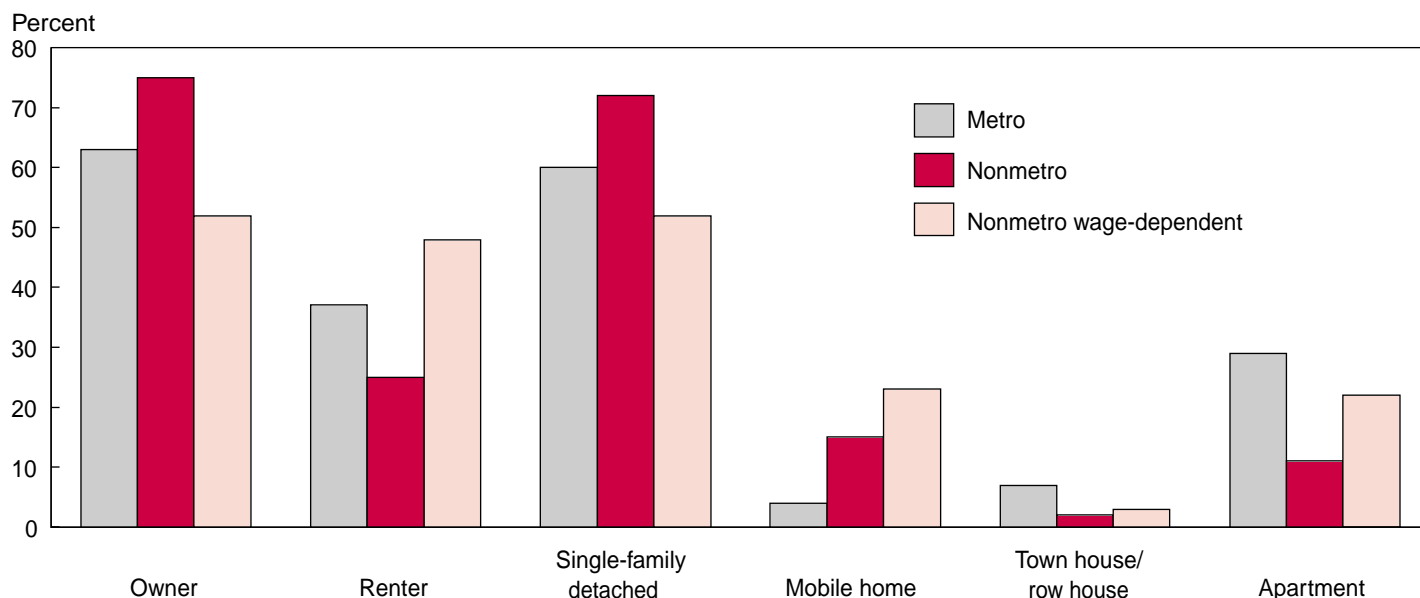
*Overall quality:* Householders rated both their residence and their neighborhood on a 10-point scale, with 1 the worst and 10 the best. These responses are reported here in three categories: 9 - 10 are “good,” 5 - 8 are “moderate,” and 1 - 4 are “poor.”

*Crowded:* Household members outnumber rooms in the housing unit.

Figure 1

#### Tenure and type of residence for metro, nonmetro, and nonmetro low-income wage-dependent households, 1997

*Most homes are single-family detached, and mobile homes are a larger share of nonmetro homes, particularly for the wage-dependent*



Source: Calculated by ERS from the 1997 American Housing Survey, HUD and Census Bureau.

either moderate or severe physical problems. By this measure, rural homes more often came up short, with over 8 percent deemed less than fully adequate, compared with under 7 percent of urban homes.

Housing costs as a percentage of income is used as a measure of affordability, with any amount over 30 percent considered problematic. The 30-percent limit, long used in Federal housing programs, is most often exceeded by urban households. The housing of 31 percent of urban households and 25 percent of rural households was deemed too expensive. When the affordability issue was addressed with higher thresholds, affordability problems continued to be more frequent in urban areas. Substituting a 50-percent threshold reduced the urban “expensive” share to 14 percent, and the rural share to 11 percent.

Rural residents were more positive about their homes and neighborhoods. When asked for their overall opinion on a 10-point scale, urban householders gave their homes and their neighborhoods lower marks than did rural householders. About 41 percent of urban and 45 percent of rural respondents gave “good” marks (either 9 or 10) to their home. The rural/urban gap in neighborhood satisfaction was much greater. Forty-nine of every 100 rural respondents gave their neighborhoods a good mark, 10 more than for urban respondents.

Nearly three-quarters of all rural households owned their homes, well above the 63 percent homeownership rate for urban households. This higher homeownership rate may be seen as a plus, but also reflects underlying causes that are less positive for rural communities. On average, rural households change residences less often than their urban counterparts—a characteristic favoring ownership. But, underlying factors may include lower rural job mobility, or greater difficulties selling rural residences. The rural homeownership rate may also be elevated by the rural population’s aging demographic profile, or a shortage of rental housing.

Nearly three of every four rural residences are conventionally built single-family homes. Detached homes of all types, including both conventional and mobile homes, total 87 percent of rural and 64 percent of urban homes. Three of 10 urban households live in an apartment, compared with 1 of 10 rural households.

Between 5 and 6 percent of both rural and urban householders reported receiving government housing assistance. These figures exclude the mostly middle-income homeowners with market-rate FHA- and VA-insured home mortgages, since they involve little or no subsidy. Recipients of government housing assistance often get substantial subsidies from Federal, State, or local sources, through rental assistance or reduced-interest-rate home mortgages.

### **Rural Low-Income Housing Problems Are Greater for the Wage-Dependent**

Housing is a basic need, with low-income households more likely to have difficulty finding acceptable housing that is also affordable. Of the Nation’s 22 million nonmetro households, nearly 10 million, or 45 percent were “low-income” by our 150 percent of poverty definition (see box, “Definitions”). Nearly 4.3 million of these low-income nonmetro households received at least half of their income from wage and salary earnings. Most of these “wage-dependent” households had little or no additional income.

Wage-dependent rural householders were much younger than other low-income householders. Nearly two-thirds were younger than 40, compared with only 13 percent of other low-income householders. And, two-thirds of other low-income householders were elderly, 10 times the elderly share of wage-dependent householders. Since wage-dependent householders were much younger, many more had young children. Single parents and married couples with children totaled over 47 percent of all wage-dependent rural households, more than three times their share of other low-income households.

Compared with other low-income rural households, the wage-dependent were more likely to have housing difficulties. Excessive housing costs, crowding, moderate physical inade-

quacies, and lower satisfaction with home or neighborhood were all more frequent for these wage-dependent households. However, the incidence of severe physical inadequacies is similar for wage-dependent and other low-income households.

At first, the poorer housing of these wage-dependent households may be surprising, given their typically higher housing expenditures and incomes near the upper end of the low-income range. Adding to this phenomenon of spending more and receiving less, the homes of low-income wage-dependent households were also typically smaller and lower valued.

Major factors behind this conundrum are wage-dependent households' greater propensity to live in mobile homes (see subsequent discussion in this article), and to be either renters or relatively new homeowners. With a few exceptions, such as the small proportion of renters that receive government subsidies, renters' housing costs reflect recent market prices.

On the other hand, the housing expenses of most homeowners are partially determined by the length of time they have owned a home. Mortgage payments of long-time homeowners were likely well below those of recent purchasers, and the current values of their homes were often determined by their income, inflation (or deflation) in home prices, and housing prices at some earlier date. Most often, youthful wage-dependent households lack the advantage of accumulated home equity, which is enjoyed by a substantial share of other low-income rural households. In consideration of these factors, housing statistics are calculated separately for renters, all homeowners, and homeowners that have a mortgage on their home (app. table 19).

While half of all wage-dependent homeowners had a mortgage on their home, only 20 percent of other low-income rural owners did. Homeowners with a substantial mortgage payment relative to their income can afford less house than can those with low or no mortgage payments. The result is that they live in a less expensive home, face higher housing expenses, or have a combination of less house and higher expenses.

By all of the indicators, rural low-income homeowners had better housing than did renters, whether or not they were wage-dependent. Although the incomes of renters were lower than those of owners, their housing expenses were typically higher. Half of wage-dependent households and three-fourths of other low-income households were homeowners. Thus, some of the higher incidence of housing difficulties among wage-dependent households can be attributed to their greater propensity to rent. But there is more to this story. Comparing owners with owners and renters with renters, wage-dependent rural households still had worse housing than did other low-income households by most measures (fig. 2). Low-income wage-dependent households were less likely to spend an excessive share of their income on housing, only because the incomes of other low-income households were typically much lower.

Whether they owned or rented, wage-dependent households were nearly twice as likely as other low-income rural households to live in a mobile home. Over 31 percent of the residences owned by low-income wage-dependent households were mobile homes. Compared with conventionally constructed homes, mobile homes are likely to combine lower home values with higher monthly housing costs. Monthly costs of mobile homes can be higher despite a lower purchase price because they are typically financed at higher interest rates over a shorter repayment period. Additionally, mobile homes are often located on rented sites, adding another component to monthly housing costs.

Wage-dependent households received government rental housing assistance much less often than did other low-income households. Only 8 percent of wage-dependent renters got such assistance, compared with nearly 20 percent of other low-income renters. This relationship was reversed for homeowners, where wage-dependent homeowners, in total and for only those with mortgages, were the most likely to have received government housing assistance. About one of every six wage-dependent households with a mortgage, and one in nine of their other low-income counterparts, received such a subsidy on their home. Most housing assistance to low-income homeowners is provided by preferential

Figure 2

### Physically inadequate and crowded homes of low-income nonmetro households, by tenure and wage-dependency

*Housing conditions of renters are worse than those of owners, while mortgaged homes are in better condition but often more crowded*



Source: Calculated by ERS from the 1997 American Housing Survey, HUD and Census Bureau.

conditions on home mortgages, meaning that those without a home mortgage would have little opportunity for such assistance.

### Housing Issues for Wage-Dependent Households Require Different Solutions

Assessment of how rural housing compares with housing in the rest of the Nation depends on the indicators chosen. The housing problems of low-income rural Americans, however, are often more severe for those who depend mainly on wage and salary earnings. Compared with other low-income rural households, wage-dependent households lived in residences that had more physical problems, were more often too small for their family size, and provided an overall quality of home and neighborhood with which they were less satisfied. Fewer wage-dependent households owned their home, and when they were owners, their residences were more often mobile homes, were typically smaller with lower values, and entailed higher monthly expenditures.

An initiative to promote mobile home loans with terms more comparable to those on other home purchase loans could help the housing situation of many low-income wage-dependent rural households. Programs to assist these households should also recognize important demographic differences from those of other low-income households. Wage-dependent householders tended to be younger and belong to a minority group. Their households more frequently included children and had at least two members. Finding ways to better meet the housing needs of these households is important to the present and future of rural America. [James Mikesell, 202-694-5432, [mikesell@ers.usda.gov](mailto:mikesell@ers.usda.gov), and George Wallace, 202-694-5369, [gwallace@ers.usda.gov](mailto:gwallace@ers.usda.gov)]

## Prevalence of Hunger Declines in Rural Households

*The proportion of rural households in which people were hungry at times because there was not enough money for food declined somewhat from 1995 to 1998. However, the proportion that were food insecure—that is, they were not consistently and dependably able to get enough food for an active and healthy life—was about the same in 1998 as in 1995. Single-parent families and racial and ethnic minorities had rates of food insecurity and hunger higher than the national average.*

**T**he long-running expansion of the U.S. economy and the continuing strength of the Nation's nutrition safety net have helped a large majority of rural American households achieve or maintain food security. During the year ending in August 1998, 88 percent of rural households were food secure (fig. 1), while 12 percent of rural households—about 2.4 million—were food insecure. Among the food insecure rural households were 0.7 million (3.4 percent of all rural households) in which food insecurity reached levels of severity great enough that one or more household members were hungry at times during the year due to inadequate resources for food.

Households are food secure when they have assured access at all times to enough food for an active healthy life, with no need for recourse to emergency food sources or other extraordinary coping behaviors to meet their basic food needs. They experience food insecurity when they do not have this assured access to enough food to fully meet basic needs at all times. As food insecurity increases in severity, the quality and variety of meals are reduced and food intake may become irregular. At still more severe levels, insufficient or irregular food intake results in periods of hunger for at least some family members. In households with children, adults usually restrict their own food intake first to provide enough food for the children. Thus, children usually do not go hungry except in households with more severe levels of adult hunger.

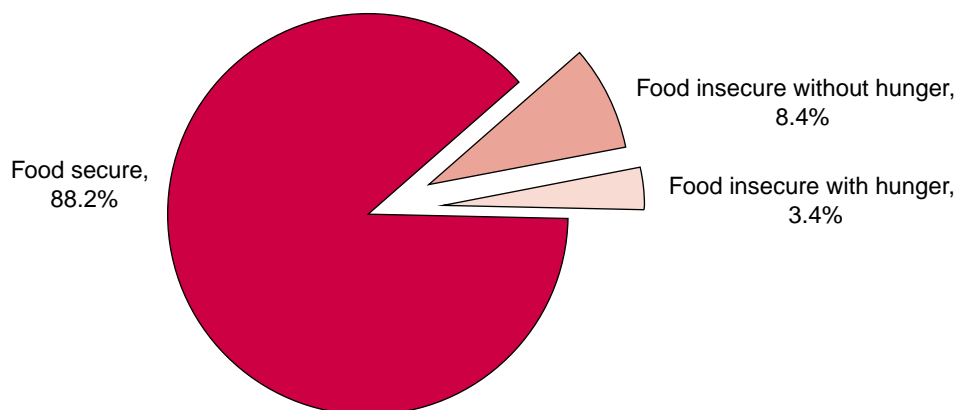
### Prevalence of Hunger Declined, Food Insecurity Unchanged, 1995-98

Last year, *Rural Conditions and Trends* first reported on new survey questions developed by USDA and the Department of Health and Human Services to monitor food insecurity and hunger in the United States (*Rural Conditions and Trends*, Vol. 9, No. 2, February 1999, pp. 91-96; see "Food Security Data," appendix p. 88). Statistics on food security, food insecurity, and hunger from this annual survey are now available for each year dur-

Figure 1

### Food security, food insecurity, and hunger in nonmetro households, 1998

*A large majority of rural households were food secure, but nearly 12 percent did not always have access to enough food for active healthy lives, and 3.4 percent had household members who were hungry at times due to a lack of money*



Source: Prepared by ERS using data from the Current Population Survey Food Security Supplement, August 1998.

ing 1995-98. The 1998 prevalence rates reported in this article, however, are not directly comparable with those for 1995 reported in last year's issue. Because of refinements in the questionnaire design and changes in the screening of households to reduce the burden on the people who respond to the survey, the data for each year must be adjusted to be comparable across years (see box, "Monitoring Trends in the Prevalence of Food Insecurity and Hunger").

When these adjustments are taken into account, the prevalence rate of hunger in rural areas declined by about half of 1 percentage point from 1995 to 1998, while the prevalence of food insecurity remained unchanged (fig. 2). Trends in rural and urban areas were virtually identical. For example, the lower prevalence of food insecurity and, to a lesser extent, of hunger, in 1997, was similar in both rural and urban areas. This trend was also consistent across regions, racial/ethnic groups, household types, and income categories. Reasons for the lower prevalence of food insecurity in 1997 as well as other year-to-year fluctuations are not yet known.

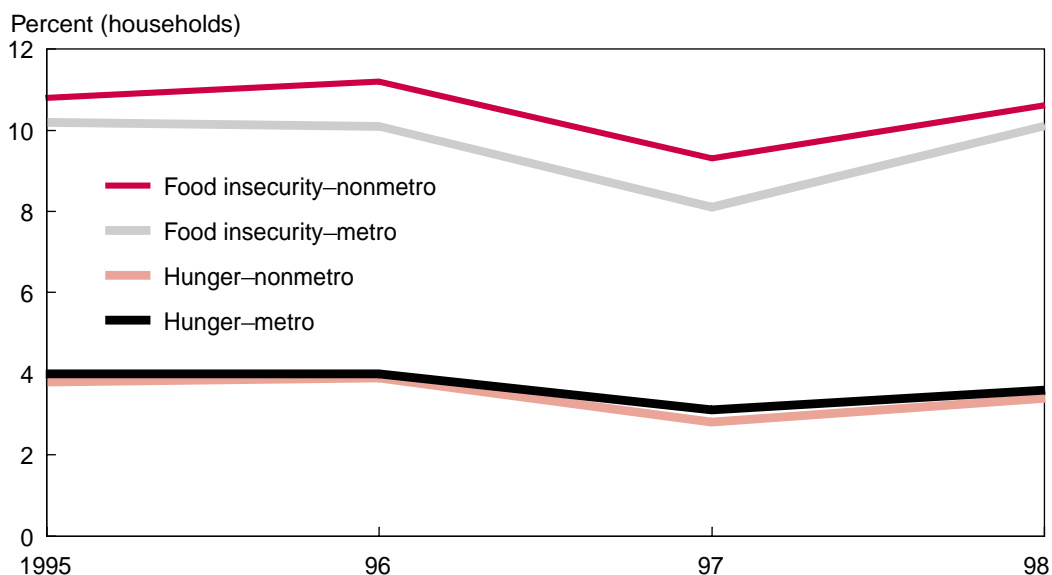
### Food Insecurity Rates Similar in Rural and Urban Areas

The prevalence of food insecurity during the year ending in August 1998 was the same (12 percent) for rural and urban households (table 1). To be classified as food insecure, a household must report at least three indicators of food insecurity, most commonly that (1) they worried that their food would run out before they got money to buy more, (2) the food they bought did not last and they did not have money to get more, and (3) they could not afford to eat balanced meals. More serious indicators, including indicators of hunger, were also reported by many food insecure households. In figure 2, food insecurity appears slightly more prevalent in rural than in urban areas, but this is due to the adjustment of the data for cross-year comparability. The statistics reported in table 1, based on the complete data as collected in 1998, reflect more accurately the food security situations in rural and urban areas.

Figure 2

#### Prevalence rates of food insecurity and hunger, by residence, 1995-98

*In both metro and nonmetro areas, the prevalence of food insecurity was about the same in 1998 as in 1995, while prevalence of hunger declined somewhat*



Note: Prevalences are adjusted for screening differences across years.

Source: Calculated by ERS based on Current Population Survey Food Security Supplement data, 1995, 1996, 1997, and 1998.



## Monitoring Trends in the Prevalence of Food Insecurity and Hunger

An important purpose of the Food Security Survey, fielded annually as a supplement to the Current Population Survey, is to monitor year-to-year changes in the prevalence of food insecurity and hunger. Information on these trends is important to assess the need for, and effects of, USDA's food assistance programs and to target those programs more effectively. Changes in the "screening" of questions in the first few years of the Food Security Survey—the years reported in this article—make the task of monitoring trends more difficult. These changes were made to improve the quality of the data and to reduce the burden placed on respondents, but they make it necessary to adjust the data to avoid biasing comparisons across years.

Screening procedures are used in the survey to reduce respondent burden and embarrassment. Households that give no indication of even slight food stress on a few initial questions skip over the remaining questions and are classified as food secure. However, the screening rules changed somewhat in each of the first 4 years of the survey. Consequently, some households were screened out in one year while, in other years, households with the same responses to the initial questions were asked the full battery of items. Some of these households affirmed enough items to be classified as food insecure. Thus, differences in screening affected the measured prevalence of food insecurity differently in each year.

The trends presented in figure 2 (and reported in *Household Food Security in the United States, 1995-1998*) are adjusted to a "common screen" for 1995, 1996, 1997, and 1998. Each year's data are recoded so that households that would have been screened out in any of the 4 years are classified as food secure without reference to their actual responses. This assures maximum comparability across years, although at some cost in sensitivity.

All other statistics in this article are based on the full data as collected in the 1998 survey and are, therefore, somewhat higher than those presented in figure 2. Food security surveys in future years will follow the 1998 screening methods, making them directly comparable to the statistics reported in this article.

### USDA Reports on Food Security and Hunger

The following reports on the Food Security Measurement Project are available from USDA:

*Household Food Security in the United States in 1995: Summary Report of the Food Security Measurement Project*

*Household Food Security in the United States in 1995: Technical Report*

*Household Food Security in the United States, 1995-1998*

*Prevalence of Food Insecurity and Hunger, by State, 1996-1998*

*Guide to Measuring Household Food Security, Revised 2000*

*Household Food Security in the United States, 1999*

Links to these reports and other information on the Federal Food Security Measurement Project are available from the ERS Domestic Food Security Briefing Room on the World Wide Web at: <http://www.ers.usda.gov/briefing/foodsecurity>.

Table 1

**Households with food insecurity, 1998**

*Levels of food insecurity were very similar in rural and urban households; food insecurity was most prevalent in single-parent families with children and among minorities*

Category	Nonmetro	Metro	U.S. total
Percent (households)			
All households	11.8	11.8	11.8
Census region:			
Northeast	9.7	10.7	10.6
Midwest	8.3	9.6	9.3
South	14.1	12.3	12.8
West	14.4	13.9	14.0
Race and ethnicity (of household head):			
White non-Hispanic	9.6	7.9	8.3
Black	27.9	23.7	24.3
Hispanic	21.2	25.4	25.0
Household structure:			
Two-parent families with children	12.8	11.1	11.5
Single-parent families with children	35.4	33.1	33.6
Multiple-adult households—no children	5.4	5.4	5.4
Single men living alone	12.8	12.2	12.3
Single women living alone	9.8	10.9	10.7
Percent (persons) <sup>1</sup>			
Age:			
All ages	13.7	13.4	13.5
0-17	20.4	19.5	19.7
18-64	12.8	12.2	12.3
65 and over	5.0	5.9	5.7

<sup>1</sup>Food security is determined at the household level. In the age breakdown, the numbers represent the percentage of people in each age category living in households classified as food insecure.

Source: Prepared by ERS using data from the Current Population Survey Food Security Supplement, August 1998.

Food insecurity was highest in the rural West and South (14 percent) and lowest in the rural Midwest (8 percent). In 1998, 14 percent of the entire rural population lived in food insecure households. This proportion was somewhat higher than the proportion of households that were food insecure because larger families are more likely to be food insecure than are smaller families and persons living alone.

### Food Insecurity Rates Higher for Families with Children

One out of five rural children lived in food insecure households, reflecting the greater economic difficulties faced by many families with children (table 1). Food insecurity was much higher in single-parent families with children than in any other household type. Nationally, one-third of such households experienced food insecurity sometime during the year ending in August 1998, and the proportion was somewhat higher in rural areas (35.4 percent). Even in two-parent families with children, the incidence of food insecurity (12.8 percent) was more than double that in multi-adult households with no children, although much lower than that of single-parent families.

The lowest rate of food insecurity was in multiple-adult households with no children present (5.4 percent) in both rural and urban areas. Food insecurity was more prevalent

among men living alone than among women living alone, even though the poverty rate for women living alone was substantially higher than that for men living alone.

The elderly are less than half as likely as working-age adults to live in food-insecure households, and this was true in both rural and urban areas. However, the questions in this survey may not adequately identify and measure food insecurity among the elderly. Problems not measured by the food insecurity scale, such as mobility limitations and restricted capacity and facilities for food preparation, pose additional challenges for some elderly people.

### **Food Insecurity Higher for Minorities**

Food insecurity was almost three times as prevalent among rural Blacks as among rural Whites. For rural Hispanics, the rate was about twice that of Whites. These differences reflect the higher poverty rates of racial and ethnic minorities (see “Rural Poverty Rate Declines, While Family Income Grows,” p. 62). For Blacks and Whites, food insecurity was more prevalent in rural than in urban areas, while for Hispanics, the reverse was true. The lower level of food insecurity among rural Hispanics is unexpected because they had a substantially higher poverty rate than did urban Hispanics. The reasons for this difference are not known, but the data were consistent with the pattern observed in 1995.

### **Hunger Due to Lack of Money Reported in 4 Percent of Rural Households**

In about one-third of food insecure households—those in which food shortages were more serious or prolonged—food intake was curtailed to the extent that household members were repeatedly hungry. These households report experiences and behaviors associated with more severe levels of food insecurity. Adults reported eating less than they felt they should and cutting and skipping meals repeatedly due to lack of money for food. Households with children reported inability to feed the children balanced meals and reliance on only a few kinds of low-cost food to feed the children because they were running out of money to buy food. At least some household members, mainly adults, in 3.4 percent of rural households experienced such hunger during the year prior to the survey; this proportion was not significantly different in urban areas (table 2).

The pattern of the incidence of hunger across regions, racial-ethnic groups, household types, and age groups followed closely that of food insecurity. In both rural and urban areas, just over 10 percent of single-parent families had episodes of hunger during the year.

### **One Percent of Rural Households Report Indicators of Hunger among Children**

Although 4.5 percent of rural children lived in households classified as food insecure with hunger (table 2), the children themselves in most of these households were not hungry. In most U.S. households, children—especially younger children—are protected from reductions in food intake unless the level of adults’ deprivation is quite severe. Nevertheless, an estimated 1.1 percent of rural households had levels of food insecurity so severe that children were also hungry at times (table 3). Households classified as having hunger among children responded “yes” to at least five of the eight items in the food security survey that asked specifically about children’s experiences of food stress. These households typically reported all of the following: they relied on a few kinds of low-cost food to feed the children because they were running out of money to buy food; they couldn’t afford to feed the children balanced meals; the children were not eating enough because the family could not afford enough food; they cut the size of the children’s meals because there was not enough money for food; and the children were hungry, but the family could not afford more food.

Children’s hunger was much more prevalent in single-parent families than in two-parent families. Rates of hunger among children were about the same for rural Blacks and non-Hispanic Whites, but were higher for rural Hispanics. [Mark Nord, 202-694-5433, [marknord@ers.usda.gov](mailto:marknord@ers.usda.gov) and F. Joshua Winicki, 202-694-5448, [jwinicki@ers.usda.gov](mailto:jwinicki@ers.usda.gov)]

Table 2

**Households with poverty-related hunger, 1998***One or more household members experienced poverty-related hunger in 3.4 percent of rural households*

Category	Nonmetro	Metro	U.S. total
Percent (households)			
All households	3.4	3.8	3.7
Census region:			
Northeast	2.0	3.5	3.4
Midwest	2.3	3.0	2.8
South	4.1	4.1	4.1
West	5.1	4.3	4.4
Race and ethnicity (of household head):			
White non-Hispanic	2.8	2.6	2.6
Black	7.2	8.7	8.5
Hispanic	6.5	6.8	6.8
Household structure:			
Two-parent families with children	2.3	2.1	2.1
Single-parent families with children	10.1	10.5	10.4
Multiple-adult households—no children	1.8	1.9	1.9
Single men living alone	5.6	5.5	5.5
Single women living alone	3.7	4.4	4.3
Percent (persons) <sup>1</sup>			
Age:			
All ages	3.4	3.7	3.7
0-17	4.5 <sup>2</sup>	4.8 <sup>2</sup>	4.7 <sup>2</sup>
18-64	3.5	3.7	3.6
65 and over	1.4	1.7	1.6

<sup>1</sup>Hunger is measured at the household level. In the age breakdown, the numbers represent the percentage of people in each age category living in households that registered hunger.

<sup>2</sup>Children are not usually hungry except in households in which adults have more severe and prolonged hunger (see table 3). Thus, the prevalence rates for children shown in this table should be interpreted as the proportion of children living in households with hunger among adults. Most of these children had diets of reduced quality and variety.

Source: Prepared by ERS using data from the Current Population Survey Food Security Supplement, August 1998.

Table 3

## Households with poverty-related hunger among children, 1998

*Slightly more than 1 percent of rural households with children reported hunger among the children*

Category	Nonmetro	Metro	U.S. total
Percent (households) <sup>1</sup>			
All households with children	1.1	0.8	0.9
Race and ethnicity (of household head):			
White non-Hispanic	1.0	.4	.6
Black	1.1	1.9	1.7
Hispanic	2.8	1.4	1.6
Household structure:			
Two-parent families with children	.3	.4	.4
Single-parent families with children	2.9	1.9	2.1
Percent (children) <sup>2</sup>			
Children	1.0	1.0	1.0

<sup>1</sup>Households classified as having hunger among children reported multiple indicators of reduced food intake among children, including cutting the size of children's meals, children not eating enough, and children being hungry because they couldn't afford more food. Households with no children were excluded from the denominator.

<sup>2</sup>Children's hunger is measured at the household level. In the bottom row, the numbers represent the percentage of children living in households in which any children were hungry.

Source: Prepared by ERS using data from the Current Population Survey Food Security Supplement, August 1998.

## Data Sources

**Employment data:** Data on metro and nonmetro employment and unemployment reported in this issue come from two sources. The monthly Current Population Survey (CPS), conducted by the Bureau of the Census for the Bureau of Labor Statistics (BLS), provides detailed information on the labor force, employment, unemployment, and demographic characteristics of the metro and nonmetro population. The CPS derives estimates based on interviews of a national sample of about 47,000 households that are representative of the U.S. civilian noninstitutional population 15 years of age and over. Labor force information is based on respondents' activity during 1 week each month. Among the data products of the CPS are the monthly files, the earnings microdata files, and the March Annual Demographic Supplement (known as the March CPS). BLS county-level employment data, the Local Area Unemployment Statistics (LAUS), are taken from unemployment insurance claims and State surveys of establishment payrolls, which are then benchmarked to State totals from the CPS. The BLS data series provides monthly estimates of labor force, employment, and unemployment for individual counties.

Each of these data sets has its advantages and disadvantages. The CPS furnishes detailed employment, unemployment, and demographic data for metro and nonmetro portions of the Nation. The LAUS provides less detailed employment data than the CPS, but it offers very current employment and unemployment information at the county level and is less subject to short-term fluctuations due to sample variability. While these data sources are likely to provide different estimates of employment conditions at any point in time, they generally indicate similar trends.

**Earnings data:** Data on metro and nonmetro earnings reported in this issue come from two sources. The data for average and median weekly earnings worked are drawn from the outgoing rotation of respondents in the monthly CPS, about one-quarter of the total sample. These respondents are asked about the usual earnings on their sole or primary job. The CPS earnings microdata file, referred to as the earnings file, consists of all records from the monthly quarter-samples of CPS households that were subject to having these questions on hours worked and earnings asked during the year. The 1999 data file contained earnings information on almost 160,000 persons. Data are available for all wage and salary workers in both the public and private sectors. The CPS collects information from people at their residences. They may work in other areas, such as nonmetro residents who work in metro areas.

The Bureau of Economic Analysis' (BEA) Regional Economic Information System is the source of the county-level earnings and jobs data used in this issue to analyze nonfarm earnings per job. These BEA data are based primarily on administrative records of the unemployment insurance program. While the CPS analysis is of the earnings of metro and nonmetro residents, the BEA earnings per nonfarm jobs analysis covers the jobs located in metro and nonmetro areas. The analyses also differ in that the CPS earnings are based on full-time workers while the BEA earnings are the average of all jobs in an area, including both full- and part-time jobs. The CPS earnings are an indicator of worker well-being while the BEA earnings are an indicator of the strength of the local labor market.

**Establishment data:** Data on establishments is drawn from County Business Patterns, an annual series published by the U.S. Census Bureau that provides estimates of employment, establishments, and payroll by industry for each county. These data are the most comprehensive source of information on geographic patterns of employment for detailed industries. The Census Bureau does not publish data that could disclose information about the operations of individual companies or establishments. To account for the suppression of these confidential data, ERS uses an enhanced County Business Patterns file produced by Claritas Incorporated that contains imputed values for the suppressed data. Employees totally exempt from the Federal Insurance Contribution Act (farm operators, other self-employed persons, hired farm workers, most government employees, railroad workers, and domestic service workers) are not counted by County Business Patterns.

**Farm labor data:** Information on the characteristics and earnings of hired farmworkers are from the CPS earnings microdata file. The data for average and median weekly earnings and usual weekly hours worked are drawn from the outgoing rotation of respondents in the monthly CPS, as were the overall metro and nonmetro earnings. The 1999 data file is based on information from 1,454 hired farmworkers, which is used to estimate the hired farmworker population.

**Food security data:** USDA sponsors the Food Security Survey, which is conducted by the Census Bureau as a supplement to the Current Population Survey once a year, alternating between spring and fall. A nationally representative sample of about 43,700 households responded to the August 1998 survey. The survey includes questions about household food expenditures, sources of food assistance, food security, and hunger. The food insecurity and hunger-related questions ask about a wide range of perceptions and behaviors reported by households known to have difficulty meeting their food needs.

Household food security status ranges from food secure at one extreme to severe hunger at the other. Based on a thorough statistical analysis of the data from the Food Security Survey, 18 questions have been identified that form a valid, reliable scale measuring the severity of food insecurity and hunger across this range. All questions referred to the 12 months prior to the survey and included a qualifying phrase reminding respondents to report only those occurrences due to limited financial resources. Restrictions to food intake due to dieting or busy schedules were excluded. The full questionnaire is available from ERS. Examples of questions across the range include:

**[Light end of scale]** “The food we bought just didn’t last, and we didn’t have money to get more.” Was that often, sometimes, or never true for you in the last 12 months?

**[Middle of scale]** In the last 12 months did you ever cut the size of your meals or skip meals because there wasn’t enough money for food?

**[Severe end of scale]** In the last 12 months did you ever not eat for a whole day because there wasn’t enough money for food?

Based on responses to these 18 questions, each household is assigned a scale score measuring the severity of food insecurity experienced over the previous year. For analytic and policy purposes, each household is then classified into one of three categories based on their food security scale score: (1) food secure; (2) food insecure with no hunger evident; and (3) food insecure with hunger. The fourth category reported last year, food insecure with severe hunger, was dropped in this year’s report in favor of a separately scaled measure of children’s hunger. This scale is based only on questions that ask specifically about the experiences of children in the household and provides a more precise measure of children’s hunger.

**Housing data:** Housing data are from the 1997 American Housing Survey, conducted by the Bureau of the Census for the Department of Housing and Urban Development. The American Housing Survey is a longitudinal survey designed to provide detailed information on housing structure, use and plumbing characteristics, equipment and fuel use, housing and neighborhood quality, financial characteristics, and household attributes of current occupants. The 1997 national survey interviewed about 46,000 households. Results are weighted to reflect the U.S. population. Data were collected annually 1973-1981 as the Annual Housing Survey, and every other year since 1981 as the American Housing Survey.

**Income, poverty and transfers data:** The household income and poverty data reported in this issue were calculated from the March Annual Demographic Supplement of the Current Population Survey, known as the March CPS. Every year, the March CPS includes supplemental questions on sources and amounts of money received during the previous calendar year. Consequently, income information in the March CPS refers to the previous year. The Census Bureau publishes estimates from the March CPS in the Consumer Income P-60 series. Information on family size and income is used to estimate

the number of families and individuals in poverty based on official guidelines issued by the Office of Management and Budget. Demographic data are available to examine the distribution of income and the characteristics of the poverty populations in metro and non-metro areas.

Information on personal income and transfers payments derives from the Bureau of Economic Analysis (BEA) employment and income data. BEA estimates annual earnings, proprietor's income, transfer payments, and other personal income at the county level based primarily on administrative records. BEA's estimates of personal income includes in-kind sources, such as Medicare and food stamps.

The CPS household income estimates exclude in-kind income, so the two sources differ in both the unit of analysis (local area income per person versus income of households) and the income definition (cash and in-kind versus cash only). The CPS incomes are an indicator of household well-being while the BEA income and transfers are indicators of local area well-being and program dependence.

**Low-wage worker and county data:** The analysis of low-wage workers uses the outgoing rotation of respondents from the 1979 and 1999 Current Population Survey (see "Earnings data" in this appendix).

The county earnings data required to identify low-wage counties comes from the 1995 Covered Wages and Employment Data collected by the Bureau of Labor Statistics (BLS) of the U.S. Department of Labor. These data are collected under a cooperative program (also known as the ES-202 program) involving the Bureau of Labor Statistics and the State Employment Security Agencies, which produces a comprehensive tabulation of employment and wage information for workers covered by State unemployment insurance laws and Federal workers covered by the Unemployment Compensation for Federal Employees program. Excluded from the tabulation are members of the armed forces, the self-employed, proprietors, domestic workers, unpaid family workers, and railroad workers covered by the railroad unemployment insurance system. Partial information on agricultural industries and employees in private households is available.

In addition to standard wage and salary cash earnings, wages include vacation and leave pay, bonuses, stock options, tips, the cash value of meals and lodging, and in some States, contributions to deferred compensation plans (such as 401(k) plans). For more complete information about the ES-202 program, visit the Covered Employment and Wages page on the Bureau of Labor Statistics' website at: <http://stats.bls.gov/cewhome.htm>.

**Population and migration data:** Estimates of population change, net migration, and natural increase are from the Bureau of the Census county population estimates issued annually. Population estimates are based on various data sources. Births and deaths are based on vital statistics records. Migration estimates are derived as a residual by subtracting natural population increase from actual increases. Estimates include net gain from other counties as well as the institutional population. Data on the characteristics of migrants are from the March 1999 Current Population Survey.

## Definitions

**Civilian labor force:** Noninstitutional civilians age 16 or older who are either employed or unemployed. Individuals who are neither employed nor unemployed are out of the labor force.

**Family:** Family is defined as two or more people residing together who are related by birth, marriage, or adoption.

**Hired farmworkers:** Persons age 15 and older who do farm work for cash wages or salary, including persons who manage farms for employers on a paid basis, supervisors of farmworkers, and general farm and nursery workers.

**Household:** Households consist of all persons living in a housing unit. A house, an apartment, or a single room is considered a housing unit if it is occupied as separate living



quarters. To be classified as separate living quarters, the occupants of the housing unit must not live and eat with any other people in the structure.

**Household income:** The sum of the amounts of money received from wages and salaries; nonfarm self-employment income; farm self-employment income; Social Security or railroad retirement; Supplement Security Income; cash public assistance or welfare payments; dividends, interest, or net rental income; veterans payments; unemployment or workers' compensation; private or government employee pensions; alimony or child support; and other periodic payments for all household members.

**Inflation rate:** The percentage change in a measure of the average price level. The two measures of the average price level used in this issue are the Consumer Price Index for All Urban Consumers (CPI-U) and the chain-type price index for Personal Consumption Expenditures.

**Inmigration** and inmovement are used interchangeably.

**Low-wage counties:** A county is identified as low-wage if it falls into the top 20 percent (quintile) of rural counties ranked by the share of wage and salary workers in low-wage industries. At least 41 percent of all workers in these 465 counties are employed in industries paying average wages that would not lift a full-time, full-year worker above the poverty threshold for a family of four. Average wages are calculated for each 3-digit SIC industry in each county, rather than assuming a single average for each industry.

**Low-wage workers:** Persons ages 25 and older employed in the wage and salary workforce whose earnings, adjusted to a full-time, full-year equivalent, would fall below the weighted average poverty threshold for a family of four (\$17,028 in 1999). Workers younger than 25 are excluded to omit recent labor force entrants who are more likely to have unstable work histories or weak labor force attachment.

**Median household income:** The median household income is the income of the household at the center of the income ranking; that is, where half of all households have higher incomes and half have lower incomes. The median has the advantage of not being influenced by the very high incomes of a small minority of households or persons.

**Metro areas:** Metropolitan Statistical Areas (MSA's), as defined by the Office of Management and Budget, include core counties containing a city of 50,000 or more people or have an urbanized area of 50,000 or more and total area population of at least 100,000. Additional contiguous counties are included in the MSA if they are economically integrated with the core county or counties. For most data sources, these designations are based on population and commuting data from the 1990 Census of Population. The Current Population Survey data beginning in 1995 categorizes counties as metro and nonmetro based on population and commuting data from the 1990 census. Throughout this publication, "urban" and "metro" have been used interchangeably to refer to people and places within MSA's.

**Natural amenities index:** Natural amenities are measured using an index created at the Economic Research Service, combining measures of climate, topography, and the presence of bodies of water. The index of climate attractiveness is defined using January temperature, number of days with sun in January, July temperature (expressed as a residual when regressed against January temperature), and July humidity. Topography is defined as the difference between an index of mountainous or rugged terrain and average elevation. The presence of bodies of water is measured using the percentage of land area covered by water.

**Nonfarm earnings:** The sum of wage and salary income, other labor income, such as privately administered pension and profit-sharing plans, and current production income of nonfarm sole proprietorships, partnerships, and tax-exempt cooperatives.

**Nonmetro areas:** Counties outside metro area boundaries. Throughout this publication, "rural" and "nonmetro" are used interchangeably to refer to people and places outside of MSA's.

**Outmigration** and outmovement are used interchangeably.

**Personal income:** The sum of money income to a person from all sources, from which money income is regularly received, reported as having been received in the previous calendar year. The sources of money income are wages and salary; net income from the operation of a business or farm; dividends, interest, royalties, and net rental income; alimony and child support payments received from outside the household; pensions; and transfer payments. Specifically excluded under this definition are windfalls, such as a lump sum payment of an inheritance even though in money; capital gains or losses; income in kind; and all within-household gifts or transfers whether in cash or kind.

**Poverty:** A person is in poverty if his or her family's money income is below the official poverty threshold appropriate for that size and type of family. Different thresholds exist for elderly and nonelderly persons living alone, for two-person families with and without elderly heads, and for different family sizes by number of children. The thresholds are adjusted for inflation annually using the Consumer Price Index.

**Region:** For analytical purposes, the United States is divided into four Census regions, which are further divided into nine divisions.

*Northeast region:*

New England—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

Middle Atlantic—New Jersey, New York, and Pennsylvania.

*Midwest region:*

East North Central (or Great Lakes)—Illinois, Indiana, Michigan, Ohio, and Wisconsin.

West North Central—Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota.

*South region:*

South Atlantic—Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia.

East South Central—Alabama, Kentucky, Mississippi, and Tennessee.

West South Central—Arkansas, Louisiana, Oklahoma, and Texas.

*West region:*

Mountain—Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming.

Pacific—Alaska, California, Hawaii, Oregon, and Washington.

**Rural-urban continuum codes:** Classification system developed by ERS to group counties by the size of their urban population and their adjacency to larger areas. (See Margaret A. Butler and Calvin L. Beale, *Rural-Urban Continuum Codes for Metro and Nonmetro Counties*, 1993, AGES 9425, U.S. Department of Agriculture, Economic Research Service, Sept. 1994).

**Metro counties—**

Central counties of metro areas of 1 million population or more

Fringe counties of metro areas of 1 million population or more

Counties in metro areas of 250,000 to 1 million population

Counties in metro areas of fewer than 250,000 population

**Nonmetro counties—**

Urban population of 20,000 or more, adjacent to a metro area

Urban population of 20,000 or more, not adjacent to a metro area

Urban population of 2,500 to 19,999, adjacent to a metro area

Urban population of 2,500 to 19,999, not adjacent to a metro area

Completely rural or less than 2,500 urban population, adjacent to a metro area

Completely rural or less than 2,500 urban population, not adjacent to a metro area

Nonmetro adjacent counties—

Nonmetro counties are classified as adjacent if they are physically adjacent to one or more metro areas and have at least 2 percent of the employment labor force in the county commuting to the central metro county for work.

**Transfer payments:** Cash or goods that people and nonprofit institutions receive from government and some businesses (for example, liability payments) for which no work is currently performed. Receipt of transfer payments, however, may reflect work performed in the past. For example, elderly people receive Social Security now because they worked earlier in their lives and paid taxes to fund the program. Government transfers to individuals are grouped into the following categories: retirement and disability programs, medical programs, income maintenance programs, unemployment insurance, veterans' programs, and other. Further classification combines Medicaid benefits with income maintenance benefits to form a public assistance category comparable with the classification used by the Social Security Administration.

Note that payments from farm commodity programs are received as part of farmers' gross cash income from current farming activities. They are not transfer payments.

**Typology codes:** Classification system developed and periodically revised by ERS to group counties by economic and policy-relevant characteristics. The typology codes used in this issue are those described in Peggy J. Cook and Karen L. Mizer, *The Revised ERS County Typology: An Overview*, RDRR-89, U.S. Department of Agriculture, Economic Research Service, Dec. 1994.

Economic types (mutually exclusive, a county may fall into only one economic type):

Farming dependent—Farming contributed a weighted annual average of 20 percent or more of total labor and proprietors' income over the 3 years from 1987 to 1989.

Mining dependent—Mining contributed a weighted annual average of 15 percent or more of total labor and proprietors' income over the 3 years from 1987 to 1989.

Manufacturing dependent—Manufacturing contributed a weighted annual average of 30 percent or more of total labor and proprietors' income over the 3 years from 1987 to 1989.

Government dependent—Federal, State, and local government activities contributed a weighted annual average of 25 percent or more of total labor and proprietors' income over the 3 years from 1987 to 1989.

Services dependent—Service activities (private and personal services, agricultural services, wholesale and retail trade, finance, insurance, real estate, transportation, and public utilities) contributed a weighted annual average of 50 percent or more of total labor and proprietors' income over the 3 years from 1987 to 1989.

Nonspecialized—Counties not classified as a specialized economic type over the 3 years from 1987 to 1989.

Policy types (overlapping, a county may fall into any number of these types and one economic type):

Retirement-destination—The population age 60 years and over in 1990 increased by 15 percent or more during 1980-90 through inmovement of people.

Federal lands—Federally owned lands made up 30 percent or more of a county's land area in 1987.

Commuting—Workers age 16 years and over commuting to jobs outside their county of residence were 40 percent or more of all the county's workers in 1990.

Persistent-poverty—Persons with poverty-level income in the preceding year were 20 percent or more of total population in each of 4 years: 1960, 1970, 1980, 1990.

Transfers-dependent—Income from transfer payments contributed a weighted annual average of 25 percent or more of total personal income over the 3 years from 1987 to 1989.

**Unemployment rate:** The number of unemployed people 16 years and older as a percentage of the civilian labor force age 16 years and older.

**Urban influence codes:** Classification system developed by ERS to group nonmetro counties by the size of their largest city and their adjacency to either large or small metro areas. (See the "Measuring Rurality" briefing room at the ERS website: <<http://www.ers.usda.gov>> for more information.)

#### Metro

Large—Central and fringe counties of metro areas of 1 million population or more

Small—Counties in metro areas of fewer than 1 million population

#### Nonmetro

Adjacent to large metro with own city—adjacent to a large metro area and county contains its own city of 10,000-49,999 residents

Adjacent to large metro without city—adjacent to a large metro area and the county contains no city of at least 10,000 residents

Adjacent to small metro with own city—adjacent to a small metro area and county contains its own city of 10,000-49,999 residents

Adjacent to small metro without city—adjacent to a small metro area and the county contains no city of at least 10,000 residents

Not adjacent with city—not adjacent to a metro area and county contains its own city of 10,000-49,999 residents

Not adjacent with town—not adjacent to a metro area and contains its own town of 2,500-9,999 residents

Not adjacent totally rural—not adjacent to a metro area and contains no town of even 2,500 residents

Note: For a nonmetro county to be classified as adjacent, it must physically abut a metro area and have at least 2 percent of its employed labor force commuting to central metro counties for work. A nonmetro county that is adjacent to metro areas of both sizes is classified as adjacent to the metro area to which the largest percent of its employed labor force commutes to work. The metro-nonmetro definition is based on the Office of Management and Budget definition as of June 1, 1993.

## Appendix Tables

**Appendix table 1—Nonmetro population trends by county status and wage level, 1990-95 and 1995-99**

Item	Counties	Declining		Population			Change		Net migration		Net migration rate	
		1990-95	1995-99	1990	1995	1999	1990-95	1995-99	1990-95	1995-99	1990-95	1995-99
	Number	Percent		Thousands			Percent		Thousands		Percent	
All nonmetro	2,290	25.9	37.3	50,906	53,419	54,780	4.9	2.5	1,480	758	2.9	1.4
Not low wage	1,827	21.9	34.9	46,497	48,818	50,071	5.0	2.6	1,339	676	2.9	1.4
Low wage	463	41.5	47.1	4,409	4,601	4,709	4.4	2.3	141	82	3.2	1.8
By adjacency status:												
Nonadjacent	1,301	33.5	48.3	22,835	23,796	24,152	4.2	1.5	490	88	2.1	.4
Not low wage	964	28.2	46.0	20,125	20,998	21,312	4.3	1.5	424	54	2.1	.3
Low wage	337	48.7	54.9	2,710	2,799	2,839	3.3	1.5	66	34	2.4	1.2
All adjacent	989	15.8	23.0	28,070	29,622	30,628	5.5	3.4	990	670	3.5	2.3
Not low wage	863	14.8	22.5	26,372	27,820	28,759	5.5	3.4	915	621	3.5	2.2
Low wage	126	22.2	26.2	1,698	1,802	1,870	6.1	3.7	75	48	4.4	2.7
Adjacent to large metro	184	10.3	12.5	6,008	6,433	6,744	7.1	4.8	285	221	4.7	3.4
Not low wage	167	10.2	12.0	5,828	6,242	6,542	7.1	4.8	275	210	4.7	3.4
Low wage	17	11.8	17.6	179	191	202	6.4	5.8	11	11	5.9	5.7
Adjacent to small metro	805	17.0	25.3	22,063	23,189	23,884	5.1	3.0	705	449	3.2	1.9
Not low wage	696	15.9	25.0	20,544	21,578	22,217	5.0	3.0	640	411	3.1	1.9
Low wage	109	23.9	27.5	1,519	1,611	1,667	6.1	3.5	64	38	4.2	2.3
By county type:												
Farming	556	50.9	58.6	4,650	4,795	4,854	3.1	1.2	71	15	1.5	.3
Not low wage	334	44.3	53.0	3,297	3,425	3,484	3.9	1.7	61	16	1.9	.5
Low wage	222	60.8	67.1	1,353	1,370	1,370	1.2	.0	10	-1	.7	-1
Mining	146	37.0	52.7	2,847	2,914	2,917	2.4	.1	3	-35	.1	-1.2
Not low wage	131	35.1	52.7	2,753	2,817	2,819	2.3	.0	0	-36	.0	-1.3
Low wage	15	53.3	53.3	94	97	98	3.4	1.3	3	1	3.0	1.4
Manufacturing	506	12.3	25.1	15,771	16,457	16,870	4.4	2.5	376	225	2.4	1.4
Not low wage	480	12.3	25.4	15,449	16,116	16,515	4.3	2.5	362	213	2.3	1.3
Low wage	26	11.5	19.2	322	341	356	6.1	4.3	15	12	4.5	3.4
Government	253	15.0	31.6	6,573	6,917	7,083	5.2	2.4	102	16	1.6	.2
Not low wage	200	14.5	33.0	5,849	6,135	6,277	4.9	2.3	70	9	1.2	.1
Low wage	53	17.0	26.4	723	782	806	8.1	3.1	32	7	4.5	.9
Services	323	18.0	32.2	9,594	10,284	10,654	7.2	3.6	522	281	5.4	2.7
Not low wage	263	16.3	32.3	8,731	9,368	9,702	7.3	3.6	477	249	5.5	2.7
Low wage	60	25.0	31.7	863	916	952	6.2	4.0	44	32	5.2	3.4
Unspecialized	485	19.6	26.8	11,106	11,671	12,018	5.1	3.0	396	254	3.6	2.2
Not low wage	399	18.3	26.8	10,064	10,589	10,906	5.2	3.0	361	224	3.6	2.1
Low wage	86	25.6	26.7	1,042	1,081	1,111	3.8	2.8	36	30	3.4	2.8
Retirement	190	.5	3.7	5,206	5,919	6,386	13.7	7.9	631	425	12.1	7.2
Not low wage	150	.0	4.0	4,678	5,327	5,747	13.9	7.9	571	381	12.2	7.1
Low wage	40	2.5	2.5	528	592	639	12.3	7.8	60	44	11.4	7.5
Persistent poverty	539	27.1	37.3	9,568	9,956	10,158	4.1	2.0	129	40	1.4	.4
Not low wage	384	24.2	37.2	7,935	8,251	8,413	4.0	2.0	91	22	1.2	.3
Low wage	155	34.2	37.4	1,633	1,705	1,745	4.4	2.3	38	19	2.3	1.1
Commuting	381	11.5	11.5	6,049	6,460	6,796	6.8	5.2	299	268	4.9	4.1
Not low wage	282	11.0	11.0	4,992	5,336	5,618	6.9	5.3	246	221	4.9	4.1
Low wage	99	13.1	13.1	1,057	1,124	1,178	6.3	4.8	54	47	5.1	4.2
Transfers dependent	385	25.7	36.4	6,660	6,971	7,106	4.7	1.9	226	97	3.4	1.4
Not low wage	260	23.8	38.5	5,276	5,510	5,603	4.4	1.7	167	64	3.2	1.2
Low wage	125	29.6	32.0	1,384	1,462	1,503	5.6	2.8	59	33	4.3	2.2
Recreation	282	7.1	20.2	7,722	8,457	8,859	9.5	4.7	559	310	7.2	3.7
Not low wage	213	5.6	21.1	6,969	7,634	7,990	9.5	4.7	498	270	7.1	3.5
Low wage	69	11.6	17.4	752	824	868	9.5	5.4	61	40	8.1	4.9

Notes: Adjacency is defined by the urban influence codes, Ghelfi and Parker, *A County Level Measure of Urban Influence*, ERS staff paper AGES-9702, Feb. 1997. County types are not mutually exclusive, except that farming, mining, manufacturing, government, services, and unspecialized county types are exclusive of one another. Recreation counties are defined by Johnson and Beale in *Rural Conditions and Trends*, Vol. 5, No. 1, Spring 1994. All other types are defined in Cook and Mizer, *The Revised Economic Research Service County Typology: An Overview*, RDRR-89, Economic Research Service, 1994.

Source: Calculated by ERS using data from the Bureau of the Census.

**Appendix table 2—Metro labor force and employment, seasonally adjusted, first quarter 1990 through fourth quarter 1999**

Year/quarter		Labor force	Employed	Labor force growth	Employment growth
		Thousands		Percent	
1999	4th	114,122	109,799	1.0	1.5
	3rd	113,847	109,391	1.1	1.4
	2nd	113,535	109,024	1.2	1.5
	1st	113,195	108,624	2.2	2.6
1998	4th	112,570	107,941	2.4	3.0
	3rd	111,916	107,151	2.1	2.2
	2nd	111,341	106,576	1.3	1.9
	1st	110,976	106,080	.7	1.2
1997	4th	110,777	105,765	.9	1.5
	3rd	110,521	105,383	1.7	2.1
	2nd	110,064	104,845	1.8	2.4
	1st	109,581	104,225	2.1	2.5
1996	4th	109,024	103,594	2.3	2.7
	3rd	108,405	102,913	1.7	2.3
	2nd	107,945	102,320	1.5	2.1
	1st	107,549	101,798	.6	.8
1995	4th	107,382	101,594	1.4	1.6
	3rd	107,005	101,203	1.3	1.4
	2nd	106,650	100,845	1.3	1.1
	1st	106,311	100,559	1.3	1.9
1994	4th	105,974	100,086	.5	1.9
	3rd	105,830	99,627	1.2	2.2
	2nd	105,504	99,096	1.4	2.5
	1st	104,131	98,481	1.2	2.3
1993	4th	104,822	97,924	1.5	2.1
	3rd	104,426	97,406	1.2	1.8
	2nd	104,106	96,962	1.2	1.5
	1st	103,798	96,607	-.1	1.4
1992	4th	103,835	96,279	.4	1.2
	3rd	103,729	95,987	1.1	.8
	2nd	103,458	95,787	1.6	.8
	1st	103,055	95,609	2.9	1.1
1991	4th	102,310	95,357	1.3	.2
	3rd	101,977	95,300	.1	-.1
	2nd	101,964	95,332	.3	-1.0
	1st	101,884	95,565	.1	-1.8
1990	4th	101,853	96,008	.0	1.7
	3rd	101,863	96,427	.6	-6
	2nd	101,714	96,568	.4	.0
	1st	101,618	96,565	NA	NA

NA = Not available.

Source: Calculated by ERS using data from Bureau of Labor Statistics' Local Area Unemployment Statistics.

## Appendix Tables

**Appendix table 3—Nonmetro labor force and employment, seasonally adjusted, first quarter 1990 through fourth quarter 1999**

Year/quarter		Labor force	Employed	Labor force growth	Employment growth
		Thousands		Percent	
1999	4th	26,387	25,108	.3	1.1
	3rd	26,365	25,040	0	.5
	2nd	26,365	25,006	-.5	-.1
	1st	26,400	25,012	1.1	1.7
1998	4th	26,331	24,909	2.8	3.3
	3rd	26,147	24,705	2.2	2.3
	2nd	26,006	24,564	0.7	1.4
	1st	25,959	24,477	-1.2	-.9
1997	4th	26,038	24,531	-.7	-.3
	3rd	26,087	24,549	.3	.6
	2nd	26,066	24,515	.5	1.5
	1st	26,031	24,427	.7	1.3
1996	4th	25,984	24,349	.7	1.2
	3rd	25,936	24,278	.5	1.0
	2nd	25,906	24,219	1.2	1.3
	1st	25,830	24,138	.8	.5
1995	4th	25,778	24,110	.9	.7
	3rd	25,720	24,066	1.0	.4
	2nd	25,659	24,039	1.1	.5
	1st	25,588	24,010	1.3	1.9
1994	4th	25,504	23,896	1.6	2.7
	3rd	25,405	23,740	2.1	2.9
	2nd	25,276	23,570	1.9	3.1
	1st	25,155	23,392	1.7	2.8
1993	4th	25,050	23,228	1.7	2.6
	3rd	24,944	23,078	1.9	2.7
	2nd	24,827	22,923	2.3	1.9
	1st	24,689	22,814	.3	1.8
1992	4th	24,673	22,711	0	1.3
	3rd	24,676	22,639	1.9	1.9
	2nd	24,559	22,530	2.3	1.9
	1st	24,419	22,424	4.3	2.7
1991	4th	24,164	22,276	1.4	.5
	3rd	24,080	22,246	1.0	-1.0
	2nd	24,022	22,173	1.4	-.4
	1st	23,941	22,143	.9	-.5
1990	4th	23,886	22,198	1.7	-1.0
	3rd	23,783	22,221	.8	-.4
	2nd	23,738	22,247	.3	.3
	1st	23,719	22,233	NA	NA

NA = Not available.

Source: Calculated by ERS using data from Bureau of Labor Statistics' Local Area Unemployment Statistics.

**Appendix table 4—Nonmetro employment and unemployment, low-wage counties and other nonmetro counties, 1985-99**

Year	Employment			Unemployment		
	Low-wage counties	Other nonmetro counties	Nonmetro total	Low-wage counties	Other nonmetro counties	Nonmetro total
Thousands						
1985	1,771.5	19,057.0	20,828.5	194.0	1,926.1	2,120.1
1986	1,764.3	19,204.5	20,968.7	198.5	1,916.7	2,115.2
1987	1,783.0	19,524.2	21,307.2	176.7	1,668.5	1,845.2
1988	1,810.0	19,977.7	21,787.7	156.3	1,469.4	1,625.7
1989	1,838.3	20,404.3	22,242.5	145.0	1,392.0	1,537.0
1990	1,831.5	20,393.3	22,224.9	139.9	1,412.8	1,552.7
1991	1,835.7	20,373.7	22,209.4	159.3	1,681.6	1,841.0
1992	1,867.5	20,709.2	22,576.7	171.9	1,834.7	2,006.6
1993	1,898.7	21,113.1	23,011.8	166.9	1,701.4	1,868.3
1994	1,961.5	21,689.6	23,651.2	154.7	1,535.9	1,690.6
1995	1,996.5	22,060.4	24,056.8	153.3	1,474.9	1,628.3
1996	2,003.3	22,240.1	24,243.4	159.7	1,509.2	1,668.9
1997	2,012.8	22,493.3	24,506.1	148.1	1,404.5	1,552.6
1998	2,016.1	22,648.3	24,664.5	140.4	1,308.8	1,449.1
1999	2,041.1	23,000.4	25,041.5	125.6	1,214.9	1,340.6

Source: Calculated by ERS using data from Bureau of Labor Statistics' Local Area Unemployment Statistics.



## Appendix Tables

**Appendix table 5—Demographic and earnings characteristics of hired farmworkers, annual averages, 1990-99**

Characteristics	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Thousands										
Number of workers	886	884	848	803	793	849	906	889	875	840
Percent										
Total	100	100	100	100	100	100	100	100	100	100
Sex:										
Male	82.9	82.4	83.8	84.7	83.7	84.5	84.2	83.3	83.8	80.7
Female	17.1	17.6	16.2	15.3	16.3	15.5	15.8	16.7	16.2	19.3
Racial/ethnic group:										
White	61.0	60.3	59.7	57.5	51.3	53.5	58.9	52.4	52.4	50.6
Hispanic	29.4	28.3	30.7	33.6	41.3	41.1	36.0	41.0	41.8	43.0
Black and other	9.6	11.4	9.6	8.9	7.4	5.3	5.1	6.6	5.8	6.4
Age (years):										
Less than 25	31.5	25.0	24.7	27.2	28.0	30.1	27.9	30.7	28.4	30.4
25-44	47.6	51.6	52.6	51.1	48.8	44.2	46.0	45.6	46.7	44.0
45-59	14.4	15.1	16.3	16.2	17.2	18.2	19.1	17.1	17.8	18.8
60 and older	6.5	8.3	6.4	5.5	6.0	7.5	7.0	6.6	7.1	6.8
Marital status:										
Married	53.3	53.4	53.5	51.8	58.5	58.5	56.3	52.1	51.9	55.5
Widowed, divorced, or separated	8.9	11.2	10.1	9.5	8.7	7.5	8.1	8.4	9.3	6.9
Never married	37.8	35.4	36.4	38.6	32.8	34.0	35.6	39.5	38.8	37.6
Schooling completed: <sup>1</sup>										
0-4 years	11.1	11.5	14.1	16.4	13.4	14.2	13.1	12.2	10.9	11.3
5-8 years	21.6	21.2	16.0	17.4	22.9	22.5	19.9	22.1	21.1	22.6
9-11 years	22.8	22.6	27.0	21.8	22.7	22.7	24.2	24.8	24.9	20.7
12 years	31.4	31.0	26.9	27.0	25.9	25.9	25.4	22.3	26.5	27.1
13 years or more	13.1	13.7	16.0	17.4	15.6	14.7	17.4	18.6	16.6	18.3
Census region:										
Northeast	6.9	6.1	6.1	6.1	6.0	7.1	7.2	6.4	7.4	6.8
South	35.6	37.1	37.8	37.5	39.4	32.3	30.9	32.1	31.4	32.9
Midwest	24.1	23.3	23.7	21.4	18.4	20.0	23.9	19.8	19.1	19.6
West	33.4	33.5	32.4	35.0	36.2	40.6	38.0	41.7	42.2	40.7
Dollars										
Median weekly earnings: <sup>2</sup>										
Full-time workers <sup>3</sup>	306	296	285	288	281	284	297	286	294	320
All workers	255	257	242	254	268	262	265	260	266	280

Note: Data for 1994 and later years are not directly comparable with data for 1993 and earlier years.

<sup>1</sup>Educational attainment levels, beginning January 1992, were revised to reflect degrees or diplomas received rather than years of school completed.

<sup>2</sup>Median earnings are in 1999 dollars.

<sup>3</sup>Full-time workers usually work 35 or more hours per week.

Source: Calculated by ERS using data from the Current Population Survey earnings microdata file.

**Appendix table 6—Demographic and earnings characteristics of all wage and salary workers, annual averages, 1990-99**

Characteristics	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Thousands										
Number of workers	104,351	103,166	104,054	105,407	108,166	110,220	112,142	114,697	116,882	119,130
Percent										
Total	100	100	100	100	100	100	100	100	100	100
Sex:										
Male	52.7	52.5	52.2	52.1	52.4	52.4	52.2	52.2	52.2	52.0
Female	47.3	47.5	47.8	47.9	47.6	47.6	47.8	47.8	47.8	48.0
Racial/ethnic group:										
White	78.3	78.1	77.9	77.7	76.3	76.2	75.0	74.0	73.4	73.1
Hispanic	7.9	8.0	8.0	8.2	9.3	9.5	9.7	10.4	10.6	10.8
Black and other	13.8	13.9	14.1	14.1	14.4	14.3	15.3	15.6	16.0	16.1
Age (years):										
Less than 25	15.8	17.2	16.7	16.6	17.1	16.8	16.2	16.4	16.7	16.8
25-44	56.5	55.4	55.2	54.7	54.3	53.9	53.8	53.0	52.1	51.2
45-59	21.8	21.7	22.5	23.2	23.4	24.0	24.7	25.4	25.9	26.6
60 and older	5.9	5.7	5.6	5.5	5.2	5.3	5.3	5.2	5.3	5.4
Marital status:										
Married	58.2	58.5	58.3	58.2	57.9	58.0	58.0	57.0	56.4	56.2
Widowed, divorced, or separated	14.3	14.3	15.4	14.6	14.5	14.4	14.5	14.6	14.7	14.6
Never married	27.5	27.2	27.2	27.1	27.6	27.6	27.5	28.4	28.9	29.2
Schooling completed: <sup>1</sup>										
0-4 years	1.0	.9	.9	.8	.8	.8	.7	.8	.8	.7
5-8 years	4.0	3.7	3.0	2.8	2.8	2.7	2.7	2.8	2.7	2.7
9-11 years	10.8	10.2	10.1	9.8	9.5	9.5	9.7	10.0	10.2	9.9
12 years	39.4	39.2	35.0	34.4	33.3	32.7	32.4	32.4	31.8	31.6
13 years or more	44.8	46.0	51.0	52.2	53.6	54.3	54.4	54.0	54.5	55.1
1999 dollars										
Median weekly earnings:										
Full-time workers <sup>2</sup>	515	522	522	523	540	525	511	519	531	550
All workers	459	450	449	461	450	437	440	448	466	479

Note: Data for 1994 and later years are not directly comparable with data for 1993 and earlier years.

<sup>1</sup>Educational attainment levels, beginning January 1992, were revised to reflect degrees or diplomas received rather than years of school completed.

<sup>2</sup>Full-time workers usually work 35 or more hours per week.

Source: Calculated by ERS using data from the Current Population Survey earnings microdata file.

## Appendix Tables

**Appendix table 7—Real earnings per nonfarm job, by place of work, 1990-97**

Place of work	1990	1991	1992	1993	1994	1995	1996	1997
1997 dollars								
Nonmetro	22,732	22,473	22,860	22,922	22,903	22,739	22,701	22,985
Low-wage	18,187	18,022	18,289	18,376	18,291	18,056	18,082	18,345
Farming	17,372	17,218	17,490	17,628	17,430	17,231	17,169	17,470
Commuting	17,738	17,498	17,761	17,781	17,784	17,517	17,517	17,848
Rural/remote	17,106	16,925	17,213	17,370	17,229	16,967	16,977	17,262
Other	23,073	22,809	23,205	23,268	23,256	23,098	23,055	23,341
Farming	20,136	19,959	20,282	20,437	20,406	20,296	20,271	20,564
Commuting	22,032	21,636	22,005	22,144	22,179	21,991	21,993	22,284
Rural/remote	21,559	21,201	21,540	21,565	21,486	21,237	21,172	21,387
Metro	31,230	30,955	31,872	31,866	31,785	31,946	32,142	32,825
United States	29,814	29,529	30,341	30,338	30,255	30,359	30,521	31,144
Percent								
Change in earnings from previous year:								
Nonmetro	-1.4	-1.1	1.7	0.3	-0.1	-0.7	-0.2	1.3
Low-wage	-2.5	-.9	1.5	.5	-.5	-1.3	.1	1.5
Farming	-2.7	-.9	1.6	.8	-1.1	-1.1	-.4	1.8
Commuting	-2.7	-1.4	1.5	.1	.0	-1.5	.0	1.9
Rural/remote	-2.8	-1.1	1.7	.9	-.8	-1.5	.1	1.7
Other	-1.3	-1.1	1.7	.3	-.0	-.7	-.2	1.2
Farming	-1.1	-.9	1.6	.8	-.2	-.5	-.1	1.4
Commuting	-2.3	-1.8	1.7	.6	.2	-.8	.0	1.3
Rural/remote	-2.2	-1.7	1.6	.1	-.4	-1.2	-.3	1.0
Metro	-.0	-.9	3.0	-.0	-.3	.5	.6	2.1
United States	-.2	-1.0	2.7	-.0	-.3	.3	.5	2.0
1997 dollars								
Amount by which earnings lag metro earnings:								
Nonmetro	8,497	8,482	9,012	8,944	8,882	9,207	9,442	9,841
Low-wage	13,043	12,933	13,583	13,489	13,494	13,890	14,060	14,480
Farming	13,858	13,737	14,382	14,237	14,355	14,715	14,973	15,355
Commuting	13,492	13,457	14,112	14,085	14,001	14,430	14,625	14,977
Rural/remote	14,124	14,031	14,659	14,496	14,556	14,979	15,165	15,563
Other	8,156	8,146	8,667	8,598	8,529	8,848	9,088	9,485
Farming	11,094	10,997	11,590	11,428	11,378	11,651	11,872	12,262
Commuting	9,198	9,319	9,867	9,722	9,606	9,955	10,149	10,542
Rural/remote	9,671	9,754	10,332	10,301	10,299	10,709	10,971	11,438
Percent								
Ratio of earnings to metro earnings:								
Nonmetro	72.8	72.6	71.7	71.9	72.1	71.2	70.6	70.0
Low-wage	58.2	58.2	57.4	57.7	57.5	56.5	56.3	55.9
Farming	55.6	55.6	54.9	55.3	54.8	53.9	53.4	53.2
Commuting	56.8	56.5	55.7	55.8	56.0	54.8	54.5	54.4
Rural/remote	54.8	54.7	54.0	54.5	54.2	53.1	52.8	52.6
Other	73.9	73.7	72.8	73.0	73.2	72.3	71.7	71.1
Farming	64.5	64.5	63.6	64.1	64.2	63.5	63.1	62.6
Commuting	70.5	69.9	69.0	69.5	69.8	68.8	68.4	67.9
Rural/remote	69.0	68.5	67.6	67.7	67.6	66.5	65.9	65.2

0 and -.0 = Positive and negative change of less than 0.05 percent.

Note: Previous years' earnings converted to 1997 dollars using the chained-type personal consumption expenditures price index.

Source: Calculated by ERS using data from the Bureau of Economic Analysis.

**Appendix table 8—Persons by income/poverty ratio, by residence, 1998**

Income/poverty ratio	Nonmetro	Metro	United States
	Percent		
Less than 50	5.0	5.1	5.1
50-99	9.3	7.2	7.7
100-149	10.9	8.3	8.8
150-199	11.6	8.7	9.2
200-299	21.0	16.9	17.7
300-399	15.9	14.6	14.8
400-499	10.4	11.5	11.3
500 +	15.9	27.7	25.4

Source: Calculated by ERS using data from the March 1999 Current Population Survey.

Appendix table 9—Poverty rates by residence, region, and selected characteristics, 1998

Item	Poverty rate		Share of poor	
	Nonmetro	Metro	Nonmetro	Metro
Percent				
Total	14.3	12.3	100	100
By region:				
Northwest	9.5	12.6	7.2	21.6
Midwest	10.9	10.1	23.3	17.6
South	17.6	12.5	53.5	33.3
West	15.5	13.8	16.0	27.5
By race/ethnicity:				
White, non-Hispanic	11.5	7.2	66.7	40.0
Black, non-Hispanic	29.8	25.2	19.3	27.3
Hispanic	27.4	25.5	9.1	26.9
Native American, non-Hispanic	30.1	18.4	4.0	10.0
By family type:				
Husband-wife headed families	7.8	5.8	37.4	30.3
Female-headed families	36.5	32.7	34.1	40.9
Women living alone	27.6	21.6	14.5	14.5
Men living alone	21.2	16.1	9.7	1.0
By age:				
0-17	20.4	18.5	36.8	39.7
18-64	12.2	10.2	50.9	51.2
65+	12.5	9.1	12.3	9.1
By family employment:				
One or more full-time, full-year workers	6.2	4.3	29.4	25.2
Part-time or part-year worker(s) only	33.9	32.6	34.0	35.4
No family members employed	52.6	60.9	26.0	31.7
No working-age person in family	14.0	11.2	10.6	7.7
By educational attainment (persons age 25 and older only):				
Less than high school graduation	25.6	22.8	44.9	39.1
High school diploma or GED	10.4	10.0	35.3	34.9
Some college or associate degree	7.1	6.3	14.9	17.3
Bachelor's degree or more	3.6	2.9	4.9	8.7

Note: Shares of poor by race/ethnicity and family type do not add to 100 percent because not all categories are included. Work status refers to employment during the entire year.

Source: Calculated by ERS using data from the March 1999 Current Population Survey.

Appendix table 10—Poverty rates and family income by residence, 1990-98

Year	Nonmetro				Metro			
	Poverty rate	Change from previous year	Median family income	Real change from previous year	Poverty rate	Change from previous year	Median family income	Real change from previous year
	Percent	Percentage point	1998 dollars		Percent	Percentage point	1998 dollars	
1990	16.3	NA	34,920	NA	12.7	NA	46,830	NA
1991	16.1	-.2	34,703	-217	13.7	1.0	45,477	-1,353
1992	16.9	.8	34,357	-346	14.2	.5	45,322	-155
1993	17.2	.3	35,588	1,231	14.6	.4	46,389	1,067
1994	15.8	NA	NA	NA	14.4	NA	NA	NA
1995	15.6	NA	35,041	NA	13.4	NA	45,734	NA
1996	15.9	.3	34,687	-354	13.2	-.2	46,386	652
1997	15.8	-.1	36,238	1,551	12.6	-.6	47,732	1,346
1998	14.3	-1.5	38,006	1,768	12.3	-.3	49,016	1,284

NA = Not applicable.

Notes: Change in the metro status of some counties caused a discontinuity in the 1994 data.

Source: Calculated by ERS using data from the March Current Population Survey, 1991-99.

## Appendix Tables

**Appendix table 11—Nonmetro family poverty and family income, by family characteristics, 1998**

Item	Poverty rate	Percentage point change, 1997-98	Median income	Dollar change, 1997-98 <sup>1</sup>
	Percent		1998 dollars	
All nonmetro	11.5	-1.3	38,005	1,767
Race of family householder:				
Non-Hispanic White	9.3	-1.0	40,000	1,644
Non-Hispanic Black	26.0	-2.4	25,347	309
Hispanic	24.5	-4.9	24,995	673
Non-Hispanic Asian	15.4	-3.1	49,687	12,731
Non-Hispanic Native American	29.2	5.3	26,678	290
Age of family householder:				
Less than 25	32.9	3.1	20,020	-1,166
25-44	14.6	-1.1	39,170	1,086
45-64	7.2	-2.4	47,049	3,421
65+	7.6	-.2	27,135	582
Education of householder:				
Less than high school	23.3	-1.7	22,602	1,389
High school	11.5	-.6	36,135	795
More than high school	6.0	-.6	48,642	462
Family structure:				
Married couple	7.3	-.7	42,200	1,577
Female single parent	34.6	-2.8	18,448	2,246
Number of working adults:				
0	23.1	-4.3	19,062	1,978
1	17.8	-2.4	28,533	2,073
2	3.8	.6	50,929	1,978
3+	1.3	.2	69,469	-2,129
Number of children under 18:				
None	6.1	.1	38,711	2,151
1	14.6	-1.6	36,000	430
2	13.8	-1.9	39,535	1,884
3	21.5	-5.5	36,920	3,333
4+	40.6	.6	29,610	-12
Region of residence:				
Northwest	7.8	-2.2	44,688	4,701
Midwest	9.0	-.4	42,240	2,608
South	15.3	-.2	34,935	1,730
West	12.2	-2.3	36,200	858

<sup>1</sup>Change in real 1998 dollars.

Source: Calculated by ERS using data from the March Current Population Survey, 1998 and 1999.

**Appendix table 12—Work experience of nonmetro working families, by family type and poverty status, 1998**

Item	Working poor families			Working nonpoor families		
	Female-headed families	Other families	All families	Female-headed families	Other families	All families
	Percent					
Share of families	45.9	54.1	100	11.8	88.2	100
Share of family income from earnings:						
Less than 20	9.0	9.5	9.2	3.0	3.2	3.2
20-39	10.9	4.7	7.6	4.3	3.4	3.5
40-59	11.1	7.1	9.0	10.1	5.4	5.9
60-79	14.9	6.5	10.4	19.8	10.3	11.4
More than 80	54.1	72.2	63.8	62.8	77.7	76.0
	Dollars					
Median family earnings	5,732	8,000	7,000	22,069	43,482	40,000
Median family income	8,245	9,792	8,815	28,316	49,000	46,200
	Percent					
Share of families	61.1	38.9	100	35.6	64.4	100
Share of family income from assistance:						
Less than 20	27.9	46.8	35.3	77.9	74.6	75.8
20-39	22.3	19.3	21.1	9.2	15.9	13.5
40-59	13.0	10.5	12.0	8.6	9.2	9.0
60-79	4.8	9.4	6.6	1.8	.3	.9
80+	32.0	14.0	25.0	2.5	NA	.8
	Dollars					
Median family assistance	3,120	2,561	2,760	1,800	2,800	2,514

NA = Insufficient number of cases.

Includes only families who received Temporary Assistance for Needy Families, Supplementary Security Income, or food stamps.

Source: Calculated by ERS using data from the March 1999 Current Population Survey.



## Appendix Tables

**Appendix table 13—Employment, earnings and education of nonmetro workers, by family type and poverty status, 1998**

Item	Poor workers			Nonpoor workers		
	Female-headed families	Other families	All families	Female-headed families	Other families	All families
Percent						
Share of workers	40	60	100	14.3	85.7	100
Worked:						
Full-time, full year	28.9	40.5	35.9	69.0	70.9	70.6
Part-time, full year	15.4	10.4	12.4	9.8	8.6	8.8
Full-time, part year	32.9	32.6	32.7	14.2	13.9	13.9
Part-time, part year	22.8	16.5	19.0	7.0	6.6	6.7
Dollars						
Median annual earnings	4,048	5,000	4,800	18,000	24,000	22,500
Percent						
Earnings sources:						
Wage and salary	92.3	67.3	77.4	93.8	86.6	87.8
Self-employment	4.2	20.3	13.8	3.5	6.7	6.3
Farm income	.8	8.1	5.2	.2	1.9	1.6
Combinations	2.7	4.3	3.6	2.5	4.8	4.3
Education:						
Less than high school	29.5	27.6	28.3	11.4	11.0	11.1
High school	44.3	43.3	43.7	37.2	41.5	40.9
More than high school	26.2	29.1	28.0	51.4	47.5	48.0

Source: Calculated by ERS using data from the March 1999 Current Population Survey.

Appendix table 14—Real per capita income and transfer payments, by residence, 1989-97

	Per capita income			Per capita transfers		
Item	Nonmetro	Metro	Nonmetro/ metro ratio	Nonmetro	Metro	Nonmetro/ metro ratio
	—— 1997 dollars ——		Percent	—— 1997 dollars ——		Percent
1989	17,284	24,418	70.7	3,047	3,035	100.4
1990	17,383	24,509	70.9	3,177	3,147	101.0
1991	17,170	24,067	71.3	3,395	3,358	101.1
1992	17,518	24,366	71.9	3,617	3,591	101.7
1993	17,665	24,501	72.1	3,713	3,682	100.8
1994	17,993	24,845	72.4	3,756	3,721	100.9
1995	18,141	25,457	71.3	3,877	3,828	101.3
1996	18,704	26,124	71.6	3,986	3,908	102.0
1997	19,090	26,861	71.1	4,055	3,950	102.6

Source: Calculated by ERS using data from the Bureau of Economic Analysis.

## Appendix Tables

**Appendix table 15—Per capita income and transfer payments by residence, 1997, and average annual changes in transfer payments,<sup>1</sup> 1989-97**

	1997		Average annual change <sup>2</sup>			
Item	Income	Share of transfers	1989-97	1989-91	1991-94	1994-97
	Dollars	Percent <sup>3</sup>	Percent			
Nonmetro:						
Earnings	11,630	NA	0.86	-1.15	2.02	1.46
Personal income	19,090	NA	1.17	-.32	1.57	2.00
Transfer payments	4,055	100	4.01	5.57	3.45	2.59
Retirement/disability	2,034	50.1	2.03	2.29	1.81	1.92
Social security	1,514	37.3	1.92	2.16	1.84	1.66
Medical	1,421	35.0	7.89	11.79	7.41	4.62
Medicare	788	19.4	6.46	5.04	7.53	6.33
Medicaid	625	15.4	10.18	21.69	7.73	2.78
Income maintenance programs:	364	9.0	4.15	6.74	5.54	.40
Supplemental Security Income	114	2.8	4.97	5.25	7.83	.65
Family assistance <sup>4</sup>	44	1.1	-4.20	4.57	-2.26	-12.15
Food stamps	74	1.8	.25	11.53	.12	-8.47
Other income maintenance	130	3.2	13.80	4.13	20.27	15.67
Unemployment insurance	79	1.9	7.87	25.54	-4.62	-4.40
Veterans' benefits	104	2.6	-.50	-3.27	-.89	1.17
Other transfer programs	53	1.3	2.72	-5.06	-1.99	8.76
Metro:						
Earnings	18,095	NA	1.13	-1.31	1.26	2.59
Personal income	26,861	NA	1.18	-.72	1.07	2.63
Transfer payments	3,950	100	3.70	5.21	3.51	2.01
Retirement/disability	1,969	49.8	1.95	1.99	1.85	1.86
Social security	1,286	32.6	1.71	1.87	1.75	1.42
Medical	1,421	36.0	6.79	9.51	7.11	3.99
Medicare	780	19.7	5.20	3.70	6.47	5.87
Medicaid	633	16.0	9.08	17.93	8.38	2.06
Income maintenance programs:	361	9.1	3.37	6.95	5.80	-1.64
Supplemental Security Income	108	2.7	5.02	5.47	7.68	1.08
Family assistance <sup>4</sup>	81	2.1	-2.44	4.58	-.19	-9.10
Food stamps	69	1.7	2.90	16.32	4.96	-9.05
Other income maintenance	103	2.6	9.94	1.89	15.86	11.23
Unemployment insurance	75	1.9	8.62	30.49	-2.47	-9.01
Veterans' benefits	77	2.0	-.68	-2.82	-.89	.73
Other transfer programs	47	1.1	2.80	-3.03	-1.12	6.89

NA = Not applicable.

<sup>1</sup>Government transfer payments to individuals (96 percent of all transfer payments). See p. 92 for definition of government transfer programs.

<sup>2</sup>Change in real 1997 dollars.

<sup>3</sup>Percentages shown for the major categories sum to 100. Percents for the subcategories may not sum to the category value because only selected programs are included.

<sup>4</sup>Formerly Aid to Families with Dependent Children, replaced by Temporary Assistance for Needy Families (TANF) in 1996.

Source: Calculated by ERS using data from the Bureau of Economic Analysis.

**Appendix table 16—Nonmetro per capita income and transfer payments, by region and selected county types, 1997**

County types	Per capita income	Per capita transfers	Transfers as a share of income	Share of transfers from—			Average annual change, 1989-97 <sup>1</sup>
				Retirement disability	Medical programs	Income maintenance programs	
	Dollars			Percent			
All nonmetro	19,090	4,055	21.2	50.1	35.0	9.0	4.0
Region:							
Northeast	21,231	4,315	20.3	50.1	37.2	7.2	4.4
Midwest	19,816	3,789	19.1	53.5	34.4	6.6	3.2
South	18,101	4,248	23.5	47.4	36.7	10.7	4.7
West	19,096	3,866	20.2	52.5	29.5	9.5	3.4
Rural-urban continuum:							
Highly urbanized	20,461	3,977	19.4	51.8	33.4	8.5	4.0
Urbanized	18,694	4,086	21.9	49.6	35.9	9.0	4.0
Totally rural	17,353	4,117	23.7	49.0	35.2	10.1	4.0
Metro adjacency:							
Adjacent	19,297	4,015	20.8	50.7	35.4	8.5	4.0
Nonadjacent	18,830	4,104	21.8	49.6	34.6	9.6	4.0
Other types:							
Retirement-destination	20,199	4,525	22.4	55.2	31.9	7.3	3.6
Persistent-poverty	15,968	4,349	27.2	40.7	38.8	14.6	4.8
Low wage	16,795	4,253	25.3	48.1	36.3	10.2	4.0
Commuting	18,192	3,725	20.5	50.4	35.1	9.2	3.9

Note: See p. 91 and p. 92 for definition of region and ERS county types (typology codes).

<sup>1</sup>Change in real 1997 dollars.

Source: Calculated by ERS using data from the Bureau of Economic Analysis and revised ERS topology codes.

## Appendix Tables

**Appendix table 17—Per capita transfer benefits for selected programs, by nonmetro county type, 1997;  
change in benefits, 1996-97**

Program	Per capita benefits			Change in benefits, 1996-97		
	All	Low-wage	Persistent poverty	All	Low-wage	Persistent poverty
	1997 dollars			Percent		
Social security	1,514	1,572	1,344	1.80	1.66	1.91
Medicare	788	872	864	3.71	3.66	3.38
Medicaid	625	666	819	1.83	2.14	3.18
Supplemental Security Income	114	131	216	-1.38	-1.81	-1.97
Family assistance	44	37	56	-14.59	-16.76	-12.33
Food stamps	74	89	136	-15.71	-16.12	-14.99
Other income maintenance	130	177	227	8.87	9.99	10.58

Source: Calculated by ERS using data from the Bureau of Economic Analysis.

Appendix table 18—Housing of nonmetro and metro households, 1997

Item	All	Metro	Nonmetro		
			All	Low-income	
				Wage-dependent	Not wage-dependent
Thousands					
Number of households	99,487	77,417	22,070	4,265	5,704
Percent					
Physical quality of housing unit:					
Moderately inadequate	5.2	4.9	6.5	10.1	7.6
Severely inadequate	1.8	1.8	1.7	2.7	2.9
Inadequate Total	7.0	6.7	8.2	12.8	10.5
Expensive	29.5	30.8	24.8	47.1	48.0
Crowded	7.5	7.9	5.9	10.4	2.6
Overall quality of house:					
Good	41.8	40.9	45.1	35.4	52.2
Moderate	55.0	55.9	51.7	58.9	45.2
Poor	3.2	3.2	3.2	5.7	2.6
Overall quality of neighborhood:					
Good	40.9	38.5	49.2	42.1	55.0
Moderate	54.0	55.9	47.4	52.0	42.3
Poor	5.1	5.6	3.4	5.9	2.7
Government housing assistance	5.6	5.7	5.1	7.7	6.4
House structure type:					
Single-family detached	62.4	59.6	72.4	52.4	68.9
Mobile home	6.6	4.3	14.6	23.0	14.5
Town house or row house	5.9	7.0	2.0	3.0	2.0
Apartment	25.1	29.1	11.1	21.6	14.6
Tenure:					
Owner-occupied	65.8	63.3	74.7	51.5	73.8
Rented	34.2	36.7	25.3	48.5	26.2
Race/ethnicity - householder:					
White	75.8	72.7	86.7	75.5	85.5
Black	11.9	13.1	7.7	13.3	10.0
Hispanic	8.6	9.9	4.0	7.7	3.1
Other	3.8	4.3	1.7	3.5	1.4
Age of householder:					
Less than 40	47.6	49.2	42.1	64.9	12.5
40 to 64	31.4	31.2	32.0	28.7	21.3
65 or older	21.0	19.6	25.9	6.5	66.2
Married couples:					
Total	53.2	52.2	56.4	36.7	36.0
With children under 18	30.4	30.9	28.8	22.7	5.2
One-person household	25.4	25.5	25.1	29.0	50.2
Single parent	13.2	13.6	11.9	24.5	9.5
Median housing costs as share of income	19.8	20.6	16.9	28.5	26.7
Dollars					
Median annual household income	34,500	36,000	27,200	15,000	9,552
Median monthly housing costs	543	599	362	334	230
Median home value	96,000	105,000	70,000	41,000	60,000
Square feet					
Median living space	1,685	1,750	1,500	1,200	1,312

Source: Calculated by ERS using data from the 1997 American Housing Survey, HUD and Census Bureau.

## Appendix Tables

**Table 19—Housing of low-income nonmetro households by tenure and wage-dependency, 1997**

Item	Homeowners		Homeowners with mortgages		Renters	
	Wage-dependent	Other	Wage-dependent	Other	Wage-dependent	Other
Thousands						
Number of households	2,197	4,211	998	669	2,068	1,493
Percent						
Physical quality of housing unit:						
Moderately inadequate	7.9	6.3	6.4	5.3	12.5	11.5
Severely inadequate	2.5	2.6	1.5	1.0	2.9	3.8
Inadequate total	10.4	8.8	8.0	6.3	15.4	15.3
Expensive	40.3	42.8	64.6	78.9	54.3	62.6
Crowded	7.3	1.4	8.0	2.1	13.8	5.9
Overall quality of house:						
Good	43.1	55.2	42.6	55.3	27.4	43.6
Moderate	53.6	42.7	53.9	42.6	64.5	52.2
Poor	3.3	2.0	3.5	2.1	8.1	4.2
Overall quality of neighborhood:						
Good	49.4	56.6	43.2	52.9	34.5	50.6
Moderate	46.0	41.5	47.3	44.2	58.3	44.6
Poor	4.6	2.0	9.5	2.9	7.2	4.8
Government housing assistance	7.8	1.8	17.8	11.2	7.8	19.9
House structure type:						
Single-family detached	66.9	80.4	67.3	77.6	37.0	36.4
Mobile home	31.4	16.8	30.4	20.7	14.0	8.1
Town house or row house	0.6	1.0	0.9	0.3	5.5	4.8
Apartment	1.0	1.8	1.4	1.4	43.5	50.7
Race/ethnicity of householder:						
White	78.3	88.4	81.3	82.8	72.6	77.4
Black	12.3	7.9	12.1	13.0	14.4	15.8
Hispanic	6.8	2.6	4.4	3.8	8.6	4.5
Other	2.6	1.1	2.1	0.4	4.4	2.4
Age of householder:						
Less than 40	49.6	6.6	62.2	15.5	81.1	29.3
40 to 64	39.7	20.6	34.1	39.0	16.9	23.2
65 or older	10.7	72.8	3.7	45.5	2.0	47.5
Married couples:						
Total	44.9	43.5	43.6	54.4	28.1	14.7
With children under 18	26.4	5.3	30.0	11.5	18.7	4.9
One-person household	26.5	46.2	25.9	29.5	31.6	61.3
Single parent	22.6	6.0	24.7	11.0	26.5	19.4
Median housing costs as share of income	25.8	23.4	37.4	46.6	31.8	35.7
Dollars						
Median annual household income	16,000	10,600	16,500	11,064	13,500	7,100
Median monthly housing costs	300	225	506	473	349	247
Median home value	41,000	60,000	50,000	56,500	NA	NA
Square Feet						
Median living space	1,248	1,362	1,280	1,400	1,000	1,024

NA = not applicable

Source: Calculated by ERS using data from the 1997 American Housing Survey, HUD and Census Bureau.